THE

Lumleian Lectures

ON

THE DIGESTIVE FERMENTS, AND THE PREPARATION AND USE OF ARTIFICIALLY DIGESTED FOOD.

Delivered before the Royal College of Physicians,

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LECTURE III.—PART II.

Modified Casein or Metacasein.—The conversion of casein into peptone does not take place by a direct transformation of the one body into the other. You all know that milk does not curdle or coagulate in the least degree on being boiled, but when milk is subjected to the action of pancreatic extract (provided no alkali is added) it speedily loses this negative property and curdles abundantly on boiling. This coagulation on boiling is most intense a few minutes after the addition of the extract, and it very gradually diminishes in intensity as the action goes on, and ceases altogether at the same time that acetic acid ceases to cause a precipitate. It was moreover found that if the milk was boiled at the period of the greatest intensity of this reaction, and thrown on a filter, the whole of the albuminoid matter of the milk was caught on the filter in the form of curds, and the filtrate showed not the slightest reaction of casein. These reactions revealed the interesting fact that in the transformation of casein into peptone by pancreatic extract, the first step in the process is the conversion of casein into an intermediate body, and that it is this intermediate body which is subsequently gradually changed into peptone. This body may provisionally be called "metacasein," signifying thereby that it is still casein, but in a modified condition. Metacasein is characterised by two reactions, which, taken together, serve to distinguish it from other proteid bodies; it is coagulated by boiling in neutral media, and it is precipitated in the cold by acetic acid. The conversion of casein into metacasein in pancreatic digestion takes place almost suddenly, as is shown by the following experiment, performed on the 3rd December:—Five cubic centimetres of pancreatic extract were added to 100 cubic centimetres of milk, diluted with one-fourth of its bulk of water, and maintained at blood-heat. The first slight, almost doubtful, evidence of coagulation on boiling was perceived in three minutes; in five minutes coagulation on boiling was pronounced; and in nine minutes it had reached its maximum. From this point coagulation on boiling, and precipitation on the addition of acetic acid, diminished in intensity *pari passu* very gradually for a period of two hours, when both reactions finally ceased.

Taking these observations and reactions together, it is evident that the conversion of casein into metacasein constitutes a first and distinct step in the transformation of casein by trypsin, and that this step is antecedent to the further and slower changes by which metacasein is transmuted into peptone. It is impossible not to see in this a striking analogy with the sudden transformation of gelatinous starch into soluble starch under the action of diastase, as described in a previous lecture.

When milk is rendered slightly alkaline by the previous addition of a little bicarbonate of soda, no precipitation on boiling occurs during its digestion by pancreatic extract. But the metacasein is nevertheless produced, and its presence may be detected by carefully saturating the alkali, and then boiling. For although metacasein is precipitated on boiling when the solution is neutral, it is not precipitated when the solution is even slightly alkaline. This is the reason why, in preparing peptonised milk for the sick, it is desirable to add to it a small quantity of bicarbonate of soda.

The foregoing account of the behaviour of milk with pancreatic extract will greatly facilitate the comprehension of the practical rules which must be followed in preparing peptonised dishes for invalids. I confine myself for the present to articles of which the basis is milk, or farinaceous gruel, or both together.

Peptonised Milk.—A pint of milk is diluted with a quarter of a pint of water, and heated to a temperature of about 140° F. (60° C.). Two or three teaspoonfuls of liquor pancreaticus, together with ten or twenty grains of bicarbonate of soda, are then mixed therewith. The mixture is then poured into a covered jug, and the jug is placed in a warm situation under a "cosey," in order to keep up the heat. At the end of an hour or hour and a half the product is boiled for two or three minutes. It can then be used like ordinary milk.

The object of diluting the milk is to prevent the curdling which would otherwise occur and greatly delay the peptonising process. The addition of bicarbonate of soda prevents coagulation during the final boiling, and also hastens the process. The purpose of the final boiling is to put a stop to the ferment action when this has reached the desired degree, and thereby to prevent certain ulterior changes which would render the product less palatable. The degree to which the peptonising change has advanced is best judged of by the development of the bitter flavour. The point aimed at is to carry the change so far that the bitter taste is distinctly perceived, but is not unpleasantly pronounced. As it is impossible to obtain pancreatic extract of absolutely constant strength, the directions as to the quantity to be added must be understood with a certain latitude. The extent of the peptonising action can be regulated either by increasing or diminishing the dose of the liquor pancreaticus, or by increasing or diminishing the time during which it is allowed to operate. By skimming the milk beforehand, and restoring the cream after the final boiling, the product is rendered more palatable and more milk-like in appearance.

Peptonised Gruel.—Gruel may be prepared from any of the numerous farinaceous articles which are in common use—wheaten flour, oatmeal, arrowroot, sago, pearl barley, pea or lentil flour. The gruel should be very well boiled, and made thick and strong. It is then poured into a covered jug, and allowed to cool to a temperature of about 140° F. Liquor pancreaticus is then added in the proportion of a tablespoonful to the pint of gruel, and the jug is kept warm under a "cosey" as before. At the end of a couple of hours the product is boiled, and finally strained. The action of pancreatic extract on gruel is twofold—the starch of the meal is converted into sugar, and the albuminoid matters are peptonised. The conversion of the starch causes the gruel, however thick it may have been at starting, to become quite thin and watery. The bitter flavour does not appear to be developed in the pancreatic digestion of vegetable proteids, and peptonised gruels are quite devoid of any unpleasant taste. It is difficult to say to what extent the proteids are peptonised in the process of digestion by pancreatic extract. The product, when filtered, gives an abundant reaction of peptone; but there is a considerable amount left of undissolved material. Most of this, no doubt, consists of insoluble vegetable tissue, but it also contains some unliberated amylaceous and albuminous matter. Peptonised gruel is not generally, by itself, an acceptable food for invalids, but in conjunction with peptonised milk (peptonised milk-gruel), or as a basis for peptonised soups, jellies, and blanc-manges it is likely to prove valuable.

Peptonised Milk-Gruel.—This is the preparation of which I have had the most experience in the treatment of the sick, and with which I have obtained the most satisfactory results. It may be regarded as an artificially-digested bread-and-milk, and as forming by itself a complete and highly-nutritious food for weak digestions. It is very readily made, and does not require the thermometer. First, a good thick gruel is prepared from any of the farinaceous articles above mentioned. The gruel, while still boiling hot, is added to an equal quantity of cold milk. The mixture will have a temperature of about 125° F. (52° C.). To each pint (550 cc.) of this mixture, two or three teaspoonfuls of liquor pancreaticus, and twenty grains of bicarbonate of soda, are added. It is kept warm in a covered jug under a "cosey" for a couple of hours, and then boiled for a few minutes, and strained. The bitterness of the digested milk is almost completely covered in the peptonised milk-gruel; and invalids take this compound, if not with relish, without the least objection.

Peptonised Soups, Jellies, and Blanc-manges.—I have sought to give variety to peptonised dishes by preparing

soups, jellies, and blanc-manges containing peptonised aliments. In this endeavour I have been assisted by a member of my family, who has succeeded beyond my expectations. She has been able to place on my table soups, jellies, and blanc-manges containing a large amount of digested starch and digested proteids, possessing excellent flavour, and which the most delicate palate could not accuse of having been tampered with. Soups were prepared in two ways. The first way was to add what cooks call "stock" to an equal quantity of peptonised gruel, or peptonised milk-gruel. A second and better way was to use peptonised gruel, which is quite thin and watery, instead of simple water, for the purpose of extracting shins of beef and other materials employed for the preparation of soup. Jellies were prepared simply by adding the due quantity of gelatin or isinglass to hot peptonised gruel, and flavouring the mixture according to taste. Blanc-manges were made by treating peptonised milk in the same way, and then adding cream. In preparing all these dishes it is absolutely necessary to complete the operation of peptonising the gruel or the milk, even to the final boiling, before adding the stiffening ingredient. For if pancreatic extract be allowed to act on the gelatin, the gelatin itself undergoes a process of digestion, and its power of setting on cooling is utterly abolished.

Peptonised Beef-tea.—Half a pound of finely-minced lean beef is mixed with a pint of water and twenty grains of bicarbonate of soda. This is simmered for an hour and a half. When it has cooled down to about 140° Fahr. (60° C.) a tablespoonful of the liquor pancreaticus is added. This mixture is then kept warm under a "cosey" for two hours, and occasionally shaken. At the end of this time the liquid portions are decanted and boiled for five minutes. Beef-tea prepared in this way is rich in peptone. It contains about 4·5 per cent. of organic residue, of which more than three-fourths consist of peptone, so that its nutritive value in regard to nitrogenised materials is about equivalent to that of milk. When seasoned with salt it is scarcely distinguishable in taste from ordinary beef-tea.

The extreme solubility of digested products—whether of starch or of proteids—detracts from their acceptability to the healthy. To them they appear thin and watery—they miss the sense of substance and solidity which is characteristic of their ordinary food. But to the weak invalid without appetite this sense of substance or thickening is generally an objection, and they take with more ease an aliment which they can drink like water. The jellies and blanc-manges, on the other hand, give to invalids of more power that sense of resistance and solidity which is desired by those of stronger appetite.

Clinical Remarks
ON
STRICTURE OF THE URETHRA.

BY EBEN. WATSON, M.A., M.D.,
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WE have at present three cases of stricture of the urethra in Ward No. 17, and these seem to me so typical of the great bulk of such cases that I wish to call your attention to them. I shall first notice a few points in their history and treatment, and then make a few remarks on the general subject.

The first case we come to is that of an old soldier, who has served both in Africa and India, and who has for many years been the subject of stricture. Some years ago he was under my treatment, and was dismissed cured for the time; but having neglected to have a catheter passed after leaving the hospital he has now returned worse than ever. His water comes in a very small stream after great pressure and straining. I began the treatment by passing a silver catheter (No. 7 Eng.) down to the stricture, and found that its progress was arrested in the spongy portion at the posterior part of the scrotum. From that point along the whole median line of the perineum a hard and somewhat bulky tumour was felt. He was then put under the influence of chloroform, and after trying various sizes I introduced No. 2 Eng. silver catheter, which was retained in his bladder till the evening, when it was withdrawn on account of the pain it caused. This was done on the 18th December last.

Next day the stream of water had improved, but he still felt pain referred to the left groin. Fomentations were assiduously applied to the side and to the perineum, his bowels were opened with castor oil, and he had a hot sitz-bath, followed by a laudanum injection each night.

After a few days' rest (24th December), and without chloroform, No. 2 was again introduced with great difficulty, and retained for a few hours. I then employed the bougies olivaires and silver catheters of gradually enlarging sizes until he could bear them to be retained for several days and nights continuously. Finally, a full-sized catheter (No. 10) was introduced, when the patient left with instructions to have the catheter passed twice a week.

In this case the deposit of lymph causing the stricture was very thoroughly organised, and therefore it was hard and cartilaginous to the feeling. For the same reason it yielded slowly to the plan of somewhat interrupted dilatation which I was obliged to adopt. Some patients bear continuous dilatation very well, and are quickly cured; others do not bear it so well, and it is a great mistake—a mistake which has brought this plan of treating strictures into some discredit—to insist on the retention of the catheter when it causes pain or severe rigors. A more gradual dilatation is rather to be recommended in such cases, until the stricture is able to receive a No. 5 catheter, after which the patient can generally bear it longer in the bladder, and the further dilatation proceeds more rapidly. In this cautious way I have treated a great many cases of stricture, both in public and private practice, without any death, and with no bad effects whatever.

I put all such cases under full doses of the iodide of potassium, and I believe that by its action, and by the pressure of the catheter, as well as by the diminution or absolute removal of straining in micturition, which is the fertile cause of renewed congestion of the parts, I obtain in many cases the absorption of the lymph-deposit, and something very like a cure of the complaint. Instead of the so-called rapid divulsion of a stricture leaving the urethra in a better state than dilatation by catheters, I think it really leaves it in a worse state, because the rupture caused by it in the urethra or in the surrounding areolar tissue must be filled up with new lymph, and thus the morbid mass is increased instead of being diminished; and, although a full-sized catheter may be sooner introduced with ease than it can be in the method of dilatation, still, the new material in the ruptured tissue being even more contractile than the old, the calibre of the urethra must be maintained for some time by catheterism. Hence the one method is about as long as the other for the patient; and I have seen bad results occur after Holt's operation, while dilatation has been free from any such in my experience. The question of internal urethrotomy did not arise in this case, because of the success which attended the use of the catheter, yet I believe it was just such a case as would have appeared to some surgeons a suitable one for that operation. From the amount and hardness of the mass of lymph surrounding the stricture, urethrotomy was certainly more reasonable than Holt's operation; but, though that operation would have facilitated the early introduction of the catheter, I do not see that it would have yielded a better result; in fact, I think the objection to both operations is the same—viz., that a fresh deposit of lymph is rendered necessary by either cutting or tearing the urethra at the stricture, and thus an addition is really made to the morbid condition. Hence the full relief—for we cannot call it cure—in such cases is not obtained at an earlier date than by dilatation, which, as I previously said, leaves the urethra in a healthier state than either of the other operations.

The next case to which I call your attention is also one of old stricture. It was at one time cured by the late Mr. Syme in the Edinburgh Infirmary, and has been sent to my wards as an impassable stricture. I, however, managed to pass a fine catheter, and succeeded in treating the case to a favourable termination just as the previous case was treated. The patient was always very nervous and had several severe rigors, for which he seemed to get advantage by using ten-grain doses of quinine, as well as from hot sitz-baths and morphia suppositories.

Many writers on stricture place great importance on the kind of instrument used for passing the stricture. I believe that experience in the use of an instrument is of more im-

portance than the exact kind of it. Some surgeons use nothing but flexible bougies, some rely on steel probes or sounds with slightly bulbous points, and others adhere to the catheter. I myself prefer the last-mentioned instrument, while I do not neglect to use bougies in difficult cases, when the passage is too twisted for the catheter at first; but nothing straightens the urethra so well as the catheter, and, as the urine escapes through it, it may be retained for a longer or shorter time in the bladder with safety and advantage. Then, as to the curve of the catheter I care very little, but on the whole I prefer a larger curve than that which is usually employed at present.

The third case was one of still greater difficulty than either of the others. It was likewise sent in as an impassable stricture, and it had had much treatment by catheters and otherwise before admission. Under chloroform I with great difficulty inserted a No. 1 catheter, but on the patient's recovering from the anæsthetic no urine flowed through it, and it was therefore withdrawn. It was found, unfortunately, to have some dirt in its tube, but the introduction made micturition so much easier that no instrumentation at all was attempted for a few days. I ought to have mentioned that the man was in a very weak and poor state of health, and had not been able to take more than a very little food for days previous to his admission to the hospital. This feature of his case was improved, his bowels were opened, and he was soothed with opiate suppositories. On about the eighth day, however, after his admission to the hospital, I found at my morning visit that extravasation had taken place. The perinæum and scrotum were already red and swollen. I therefore lost no time in performing perineal section on Syme's staff, at the same time freely incising the swollen parts. The urine came away abundantly by the perineal wound, and though a catheter could now be easily introduced from the point of the penis into the bladder, I did not retain one, but continued the opiate treatment with fomentations to the parts affected.

All went on well till the third day, when the man rapidly sank and died; and on inspection of the body, that staining of the tissues and organs with blood, already in a state of decomposition, which is so characteristic of septicæmia in its acute form, was everywhere found. On squeezing the parts pus was seen to escape from them, otherwise nothing particular was discovered.

In reflecting on this case, I think the cause of its unfortunate issue was quite obviously acute septicæmia from the rapidity of the sinking, without any other symptoms except slight jaundice and profuse sweating, as well as from the post-mortem appearances noted above. Then as to the cause of the extravasation, the only theory I can form is that from long and frequent straining before admission the upper part of the stricture had become softened and ready to burst, and that it gave way during the night previous to the appearance of the swelling. Both Dr. Foulis and I carefully examined the entire track of the urethra with a probe, and nothing like a false passage could be found, except a small and superficial laceration of the mucous membrane about two inches from the meatus, and which might have been produced by the point of a catheter. Even if this were so, it could not account for the extravasation into the perinæum and scrotum. We found that the stricture itself had been quite exactly and thoroughly divided in the operation, and altogether in front of the deep perineal fascia. Most likely, therefore, the aperture by which the urine escaped was very small, and was cut through by my operation wound; for we could not find it at all on the keenest search. Of course it was from the beginning an unfavourable case, one in which any operation was most likely to prove unfortunate; but we could not avoid the operation performed, which gave the man his only chance of escape. Indeed, it was not of the extravasation nor of the operation that the patient died, but of that dreadful disease which seems to attack with special frequency and virulence cases of perineal section. Nevertheless, in cases of impassable stricture, and certainly in those complicated with extravasation of urine, I do not know of any method of operating preferable to the one we are now considering; yet, in the hospital, I must confess that I have met with rather a high mortality in such cases. It appears that in the last ten years I have performed this operation in the Royal Infirmary thirteen times, and have lost three patients. But it must be remembered that these were almost all very bad cases—some of them brought in with extravasation of such duration that sloughing had already occurred in the penis and scrotum. In conclusion, the great lesson to be learned from this part of our clinical study is to beware of delay in these cases. I have never myself been obliged to puncture the bladder in any way; but if the catheter cannot be got in—say by the ordinary attendant—it would be better to draw off the urine from the bladder by puncturing with the aspirator above the pubis than to allow the man by continual straining to run the risks I have been describing. Of course, when a surgeon is called in it will be his duty to use the catheter at once, and, in all but a few very peculiar cases, he will do so with success, especially if no false passages have been previously made in the urethra.

LIVER ABSCESS AND ANTISEPTIC PARACENTESIS.

BY SIR J. FAYRER, M.D., F.R.S.

(Concluded from p. 675.)

CASE 6.—In 1866, when at Agra, I saw a young officer in camp, who after considerable exposure to heat and fatigue during hot days and cold nights, was suffering from what was thought to be pneumonia of the right lung. On examination it appeared to me that he was suffering from pneumonia, but that it was due to liver abscess which had formed insidiously, and made its way into the right lung. I did not see him again for three weeks, when he came to Calcutta. He was fearfully emaciated and hectic, with a very rapid pulse and diarrhœa. He was expectorating large quantities of pus, by which the right lung seemed to be completely overwhelmed. He appeared to be rapidly sinking, and was in an extreme state of prostration. A few days later he was put on board a steamer, in the hope, though it seemed a feeble one, that change of climate and sea air might do him good. On arrival at Galle he was so low that it was decided to land him. A telegram, describing his condition, was sent to his friends. I heard nothing more of him for four or five months, when he came to report his return to India. They had put him on board another steamer, and he had gone to Singapore. Soon after landing at Galle he began to revive a little; the expectoration diminished, and feeling stronger, was determined to try the sea air again; he embarked, soon improved, and became strong enough to walk about. He rapidly regained strength, even in the tepid climate of the Straits, and when he returned to Calcutta was apparently well, and I believe soon resumed his duties. I saw him again a few years ago, stout and well; he told me that his life had been accepted at the usual Indian rates by an insurance office.

In this case there was probably only one abscess, although a very large one. I never saw anyone apparently so near death recover. His lung apparently regained its normal condition, and had not suffered permanently from the suppuration in which it had been involved.

Of course such a termination could not generally be expected in so severe a case; I relate it to show that even where a very large abscess has opened into the lung, recovery is possible.

CASE 7 is the case of a native of India in whom I punctured an abscess between the ribs behind the axillary line, and gave exit to the contents of a very large abscess. On seeing him again after some days, with his medical adviser, I found a large sloughing opening and a considerable portion of one or two ribs necrosed; repair, however, seemed to be progressing, and the condition, barring the aperture in his side and the diseased ribs, rather better than it had been. When I saw him next it was on the steps of the hospital, where he had come to see some friend, and on inquiring I found that the wound had closed. There was a deep cicatrix over the exfoliated ribs, but otherwise it had healed well. He was stout and in perfect health. I refer to this case as an exceptional one, for I have generally found where the ribs necrose and the opening becomes large from ulceration or sloughing, that the patient succumbs at last to exhaustion, if not to some other complication; and when an abscess points between the ribs, especially towards the back, it is exceedingly prone to cause necrosis.

CASE 8.—Mr. P——, aged twenty-five, a tall, vigorous young officer of cavalry, came to me on March 19th, 1880. He went to India first in January, 1876, to Bangalore; was quite well for a year. Then got jungle fever, shooting in Annamallay jungles, Mysore. This lasted for three weeks, and he lost two stone of weight. He continued to have recurrences of malarious fever once a week for the next two years, but remained at duty, and occasionally went out shooting. He then went to the Pulni hills, and before and after his return had dysentery, with great pain. This was aggravated by attending riding-school. When convalescent pain in the liver commenced. He became very ill, and says he nearly died from a severe attack of dysentery. He was actively treated, and got much better. In July, 1878, the dysentery had gone, but he had diarrhœa, and for twenty weeks he could hardly walk; had lost three stone. Diarrhœa continued, and with it pain in the side, but he began to regain strength.

He then came home. In the winter of 1878, when at his home in Yorkshire, he began suddenly to spit blood and "thick stuff," especially when he "stooped;" when, as he says, it welled out in quantities, a tumblerful at a time. This went on till August, 1879, yet all the time he seems to have been leading his usual life—riding, even hunting, shooting "one turnip field at a time," as he says. He seems also to have been gaining strength. Still had pain, but less since the blood and matter came away.

On Dec. 2nd, 1879, he returned to Bangalore, feeling pretty well. Cough and expectoration had ceased, but he was weak and knocked up by any physical or mental effort, depressed and irritable. Three days after reaching Bangalore, diarrhœa and pain in the side came on again. Dysenteric symptoms also supervened in January, 1880; got worse at riding-school, and had great pain in the liver.

A Board sent him home again in February, 1880. "He has improved on the voyage, and is now fairly well. Has had no cough since August last; weight twelve stone; looks in good condition; conjunctiva rather yellow; complexion rather florid; hepatic dulness increased posteriorly, not in front; no sign of thickening of colon; no enlargement of spleen; respiration not so good on right as on left side, but expansion normal; urine contains lithates at times, no albumen; tongue clean; temperature and pulse normal; bowels rather confined; eats well, but is easily tired; has resigned his commission. He has evidently been the subject of liver abscess, which has opened through his lung."

CASE 9.—Captain S. C——, aged thirty-seven years and six months, of abstemious habits. Service in India sixteen years and four months: in Bombay presidency—Poona, Surat, Rajpoora, Ahmedabad, Deesa, Ahmednugger, Sholapore, Baroda, Satara. In Goojerat had fever and cholera, the only sickness since infancy, up to present liver attack. Came home in 1863 with very severe Goojerat fever; the attack was most persistent; "lost his hair, and nails, and epidermis." Returned in 1865 quite well; has had no return of fever since.

July, 1875.—At Satara, Bombay, suffered pain in back and side, with some nausea and fever. Disease yielded to treatment in a few weeks.

July, 1876.—Again attacked with above symptoms in intensified form, with rigors and night sweatings. The frequency of the attacks increased until March, 1877, when he was quite prostrated, and confined to bed.

April 9th, 1877.—An unusually sharp attack, accompanied by severe rigors and some fever, leaving him in an unconscious state.

21st. — Left for Bombay. Suffered severely from the journey.

May 7th.—Put on board a steam-ship for England.

27th.—During the night, while at the watercloset, he experienced severe rigors and passed large quantities of blood and matter, became insensible, and was carried to his bed.

June 5th. — From last severe attack on May 27th his health appeared much improved. On this date, at Southampton, he experienced another, though perhaps a little less severe attack; passed much matter and blood.

As soon as able he left for London, and put himself under Dr. Murchison's care, who greatly interested himself in the case until his death.

He could not account for this disease. Is of abstemious habits, never taking spirits or wine between meals. Is married, of active habits, and very fond of field sports, which fully occupied his leisure.

CASE 10.—Surgeon E. S. R——, B.M.S. Service in India fourteen months and seven days—Calcutta, five months; Meerut, seven months; Jumrood, Kohat, Thull, the remainder. Had scarlatina as a boy; nothing else, except a fortnight's intermittent fever at Jumrood, before the liver became affected. On the 7th of November, 1878, while at Kohat, felt pain in the right shoulder. On Nov. 8th he started for Thull with pain in the shoulder and hepatic region. On arrival there he was suffering from acute hepatitis; he remained under treatment in the camp until Dec. 4th; then returned to Kohat, when the liver was enlarged, especially upwards, with tenderness on pressure. The temperature in the evening was from 102° to 103°; morning 100°. Did not feel much pain in the liver, except in the middle of December for a few days. On Dec. 31st, having been ordered to England, he left Kohat, and got to Peshawur on Jan. 1st, 1879. Left Peshawur for Rawul Pindi on Jan. 1st, and arrived there on the morning of the 2nd. That same evening, about 9 o'clock, while in bed, there was a rush of matter into the mouth, from an abscess in the liver, which had opened into the right lung. There was no previous warning of this, and he did not feel any pain, only extreme weakness. About a pint of pus was discharged that night, and also the next; but after the first two nights pus was not discharged in any quantity. Started from Bombay on Jan. 20th, and reached England on Feb. 17th. Pus continued to be discharged for the whole of this period, and up to three weeks after his arrival. About a month after the cessation of the discharge of pus, blue in considerable quantity was discharged into the right lung. This went on for about ten days. After that he rapidly improved, and about the end of the first week in May he first got out of bed, and was able to sit up. Convalescence then proceeded rapidly without any relapse. Appeared before the Board on Tuesday, March 23rd, 1880, apparently well; but not allowed to return to India yet.

CASE 11.—*A case of abscess of the liver, following dysentery, discharging itself through the right lung; recovery; patient invalided to Europe; return to India; supposed return of abscess, and second return to Europe.*—A. B——, aged thirty-three, a surgeon in the Indian service, who had previously been in good health, was attacked with acute dysentery in July, 1875, which yielded to change of air, and five weeks after, owing to exposure to wet, sun, and fatigue, symptoms—which terminated after fourteen days in the discharge of an hepatic abscess—made their appearance. For the first few days, lassitude, anorexia, and nausea were alone noticed, followed soon after by pain over the hepatic region. The pain, at first present during movement, and with a deep inspiration, soon became permanent and of a severe burning character, though not materially affected by pressure, and was associated later on with pain in the right shoulder, with the advent of which the temperature ran up from 102° to 103° in the morning and 104° in the evening, probably being coincident and due to the spread of the disease towards the diaphragm and the occurrence of pneumonia. For five or six days before the discharge of the abscess, the sense of collapse and suffocation, attended with orthopnœa, became intense, and a pustular eruption appeared, each pustule ranging in size from a pea to half a pea. The only physical signs noted were dulness on percussion and crepitation. There could not have been much liver enlargement, as the disease was only detected on the discharge of the abscess, the symptoms having been put down to pneumonia. There was not much jaundice; bowels confined, and stools of ochre colour.

Aconite was given early. It produced copious diaphoresis, but failed to reduce the temperature or give relief.

An abscess burst during the night, and about one pint of thick, flocculent, puriform fluid was coughed up at one gulp. It continued to discharge during a few days, but all the symptoms gradually disappeared, and the patient left India after about two months for Europe. He did well till he arrived at Suez, when, owing to the cold land-winds in the month of December, he was attacked with liver congestion and pleuritis, which put his life in jeopardy for six weeks. He remained in Europe one year, during which time he had six attacks of congestion; the "catch" in the side hardly ever left him. He returned to India in indifferent health, and, after several minor attacks, he finally broke down after a year and four months, and was invalided from the effects of what his medical attendant believed to be an abscess, which either became absorbed, or passed away by the bowel. The patient himself considers this to have only been a prolonged and severe attack of hepatic congestion, or

inflammation, without suppuration. It is right to say that the medical man held a different view, and it may have passed through the bowel unnoticed, as there was diarrhœa at the time.

He returned to Europe, and is now, after two years in this country, fairly well. But the "catch" in the side returns with each attack of congestion, and remains for some time. There is always a heavy, uneasy feeling about the liver, which is increased to actual pain after much fatigue. This, with nausea in the morning, bad appetite, a cracked tongue and inability to work, still remain.

As to treatment generally. In the outset it is that of acute congestion, in the hope of preventing suppuration. Leeches on the side or anus occasionally may be beneficial. Where the symptoms are acute, the pain great, and the fever high, free purgation by saline aperients; occasional mercurials; chloride of ammonium or ipecacuanha; hot fomentations over the liver; rest and a light, unstimulating diet are required so long as the acute symptoms continue, before suppuration has taken place. It is needless to say that the mercurials are not used with the intention of producing ptyalism. When there is reason to believe that matter has formed, although the physical signs of it may not be clear, attention should be directed carefully to the evacuations, especially if there be diarrhœa, as the abscess may open into the bowel. I think this is the probable explanation of recovery in some cases where it has been thought that the abscess had either never really formed or that it had undergone absorption. When opening occurs through the lung or stomach the symptoms are unmistakable.

When abscess has formed the object is to favour its evacuation, to support the strength, and to allay irritation. When sufficiently near the surface to justify puncture, it should be opened antiseptically. Much has been written and said about exploring for liver abscess, and in certain cases, where doubt exists, I think the proceeding is justifiable, using a small cannula and aspirator, when there is enlargement, tenderness on pressure, which causes nausea and disturbance of the heart's action, such as palpitation, or sickness, especially if there have been any chills, increase of temperature, or sweats. In the event of matter being detected at a considerable depth, it may in some cases be aspirated, but it may happen that, on account of its thickness and the presence of flakes of lymph, pus will not pass through the small cannula, and no satisfactory result is obtained; but if there be any marked probability of its presence, a large cannula may be used and left in after if pus is found, the most careful antiseptic precautions being observed in the subsequent dressings. Whenever the matter lies moderately near the surface, even though a certain amount of liver tissue intervene, I am inclined to think that a free incision, as in Mr. W.'s case, is best—hæmorrhage, should it occur, soon ceases, and there is much better prospect of a free drain afterwards. A large cannula may in some cases be preferable; indeed I think it would signify little which were selected, provided antiseptic precautions be carefully observed and the exit be free. In the event of exploration detecting matter deep seated, but under much liver substance, I would prefer the cannula to the knife—such as I show you, used with the aspirator, though great care should be taken not to exhaust too rapidly, or with too great force, for fear of injuring the liver tissue surrounding the cavity of the abscess and causing hæmorrhage. The treatment after the opening of an abscess is just that which is described in Dr. Anderson's case. Support the strength, and do all to obviate any decomposition in the cavity, or extension of the mischief.

My friend and colleague, Professor W. S. Palmer of Calcutta, makes the following remarks on the subject of puncture. His large experience renders them interesting:—

"You have asked me to give a brief account of the results of treatment by puncture in cases of doubtful liver abscess which came under my treatment during the period of six years, in which I had medical charge of an average of about seventy patients in the European General Hospital, Calcutta.

"Passing over cases of undoubted liver-abscess, there was still a residuum of patients presenting doubtful symptoms, in whom neither unsymmetrical enlargement nor superficial tumescence, &c., could be detected. Such patients presented symptoms varying in every degree; at the one extreme cases of general cachexia, with irregular slight febrile attacks, would exhibit symptoms as frequently attributable to deranged stomach, or bowels, or lungs only, as to the liver itself; while at the other, slight general enlargement of the organ would be found associated with that peculiar form of 'tenderness' in which pressure over the organ produced an indescribable sensation, inducing either faintness, hurried respiration, palpitation, or nausea with retching, or all of these at once.

"In all this large class of cases it was my custom to plunge a long trocar and cannula, of small diameter, into any or all parts of the liver, through a valvular opening, examining on the spot the small quantity of extracted matter for pus globules.

"It was only in very exceptional cases that any signs of pus could be detected. When it was so detected the puncture was generally followed by slight inflammatory action at the seat of puncture, which probably ended in adhesion of the organ to the parietes, and so facilitated the future opening of the abscess. When, on the other hand, no pus was found, a good deal of anxiety was felt in the earlier cases lest the puncture should be followed by any evil results. Such moments of anxiety soon, however, ceased to recur, for it very rarely happened that the patient did not express himself, the next day, as feeling very much relieved; and in no case do I remember any bad consequences resulting from such punctures. The relief was frequently only temporary, in which case a second, a third, or a fourth puncture was made at intervals of eight or ten days. In some, however, one puncture sufficed to cure."

As to the period when an abscess should be opened, it is whenever the symptoms give assurance that matter has formed, and that the operative proceedings necessary to get at it are not themselves so dangerous as to be prohibitory.

The points at which it may be opened are in the epigastrium, anywhere in the right hypochondrium, either in front or behind; between the costal cartilages, or ribs. Puncture below the ribs is to be preferred if possible, but it is not always so; and, as in Mr. W——'s case, it is necessary to perforate between them.

The dangers of mischief to the pleura or lung, and of necrosis of the ribs, are the causes of anxiety in operating through the thorax, but they may never occur. In any case the opening of a liver abscess is a critical proceeding, but it should be resorted to whenever there is a reasonable prospect of getting at the matter, for it is very desirable to anticipate spontaneous opening by any of the channels that nature may select, as all are dangerous; when into the peritoneum, pleura, or pericardium it is of necessity almost always fatal, while even into the lung, stomach, or bowel, the danger is often great, and though followed by temporary amelioration, may end in exhaustive disease or purulent contamination of the whole system.

The antiseptic system seems to improve the prospects of success from surgical interference, and it is especially on this account that I have submitted the subject for your consideration.

THE DISEASES OF THE EYE OCCURRING IN CONNEXION WITH PREGNANCY.

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WHEN we reflect on the great and manifold changes that are induced in all the organs of the body by pregnancy, it cannot be a matter of surprise that in some instances the effects of this general disturbance should be felt in the organs of sense, and therefore especially in the eyes, which respond so readily to any disorder of the vascular or of the nervous system. Yet, upon the whole, such ophthalmic affections do not appear to be very numerous, since they form the subject of no special treatise, and are only incidentally referred to either in works on obstetric medicine or in those devoted to ophthalmic surgery. Probably, unless the symptoms are unusually prominent, they are in many cases either not complained of by the patient, or if complaints of failure of vision be made, they are referred by the practitioner in attendance to general indisposition, or to disorder of the digestive organs, and especially of the liver; and

it is only when serious impairment of sight exists that the opinion and advice of the ophthalmic surgeon are requested.

It is difficult to obtain any statistics in regard to the proportion of ophthalmic diseases in pregnancy, and still less of their precise nature by one who is qualified to judge. The most reliable that I have met with are those by Winckel,[1] who had the opportunity of studying the diseases of the eye in a large lying-in hospital, and who states that he found the proportion of cases to be five in three hundred and nineteen, or a percentage proportion of one in fifty-six. It is quite possible that many of the cases which apply for relief are not directly connected with pregnancy, the affection being merely coincident with, but not caused by, that state. Thus Hirschberg, in reply to a letter of mine, mentions a case in which a young woman in the seventh month of pregnancy complained of failure of vision, which she believed to be dependent upon her condition, but the real cause of which was a cysticercus in the retina; and such cases show the extreme value to the practitioner of a knowledge of the use of the ophthalmoscope, and of the ophthalmoscopic appearances of the healthy and of the diseased eye, in enabling him to form a correct diagnosis, and thus to avoid unnecessarily active treatment on the one hand, and to overlook well-marked pathological conditions on the other.

As a preliminary to the consideration of the ophthalmic diseases associated with pregnancy, it will be expedient to refer very briefly to the physiological changes which by the best authorities are held to accompany pregnancy, and we shall then be in a position to refer some at least of the affections of the eye during this period to their true causes. In the first place, it seems to be now generally admitted that there is a considerable increase in the absolute quantity of blood contained in the system which must indeed be required to fill the largely augmented volume of the uterine sinuses, unless other organs are to be reduced to a state of comparative anæmia. For Gassner[2] has observed an increase in the total weight of the body during the last three months of pregnancy quite apart from any existing enlargement of the uterus and its contents; and in this increase there can be little doubt the blood, as one of the most important of the tissues, participates. So, again, Gscheidlen[3] and Spiegelberg state expressly that in bitches the quantity of blood is augmented during the second half of pregnancy, and they entertain no doubt that the same holds good in regard to the woman. But whilst the absolute quantity of blood is augmented, it is undoubtedly poorer in solids. The white corpuscles indeed increase in number, but this is far more than compensated for by a diminution in the number of the red corpuscles and in the quantity of albumen and salts.

In a work that has just been published—the "Chimie Pathologique" of M. Quinquaud (p. 239)—it is stated as a fact that the hæmoglobin of the blood always undergoes destruction during pregnancy, though the extent to which this deterioration proceeds varies with the accidental conditions that may be present. It would hence appear that so far from a state of hyperæmia existing, as was formerly believed, the pregnant woman is almost always in one sense anæmic. The increase in the number of the white corpuscles accounts for the larger proportion of fibrin long ago noticed by Andral and Gavarret; and as this fibrin is not very rapidly coagulable the corpuscles have time to fall through the plasma, and a buffy coat is consequently not uncommon in blood drawn during the later months of pregnancy; hence the idea at one time entertained that the blood at this period resembles inflammatory blood, whereas really a state of serous plethora exists. The increase in the number of the white corpuscles may with some reason be attributed to the enlarged glands belonging to the lymphatic system that are usually found in the pelvic and lumbar regions.

The deficiency in the hæmoglobin, albumen, and salts is, of course, referable to the demands made upon the blood of the mother by the growth and development of her own uterus, and of the tissues and organs of the fœtus. When the powers of nutrition are sufficiently active to enable the woman to digest, absorb, and assimilate an increased amount of food, no disorder of the system at large may be observed; but if either the supply of food be insufficient, or the assimilating powers be defective, the blood becomes more watery, and chlorosis, or some allied condition affecting the whole body, may be established, or some particular organ may become the seat of disease. Such states may, however, not only arise from some defect of the digestive and assimilating apparatus, but from disease of the circulatory system, and especially of the heart. Under ordinary circumstances the introduction of the placentary circulation, as a new element in the systemic circulation, between the uterine arteries and veins, together with the augmented mass of the blood, necessitates an increase in the work of the heart. In a healthy woman this organ responds to the call by increasing in volume and weight, the left ventricle in particular presenting an increase in the thickness of its walls; but where the age or want of vigour of the woman prevents this response from being made, numerous and well-known troubles of the circulation follow, as palpitation, œdema, and varices of the lower extremities, attacks of faintness and general debility, and exhaustion.

But apart from the conditions of the digestive and vascular systems, all writers on gynæcology notice the powerful influence exerted by pregnancy on the nervous system, indicated by its increased excitability or susceptibility to external impressions. The mind is often depressed and anxious, sleep is disturbed, hysterical and neuralgic affections of the most diverse kinds are very common, the organs of sense being frequently implicated. It is unnecessary that I should do more than just hint at the influence that the enlargement of the uterus exerts upon the function of respiration, notwithstanding that the demand for oxygen and for the elimination of carbonic acid gas is so largely increased; and to the great importance that attaches to the due performance of all the other excretory functions, defect of which, there is good reason to believe, is one of the most potent agents in the etiology of disease in general, and in particular of disease occurring at this period.

From an examination of the various cases that have fallen under my notice I am inclined to classify the diseases of the eye that occur in connexion with pregnancy under the heads of—

1. Affections depending on general anæmia and exhaustion.

2. Affections consequent on some special lesion of the nervous system.

3. Affections depending upon, or rather associated with, albuminuria.

There can be, I think, no doubt that pregnancy has a tendency to produce, or, at least, to intensify, albuminuria, and it is difficult to refer albuminuria to disease either of the vascular or nervous systems.

Amongst the diseases of the eye occurring in pregnancy, and attributable to exhaustion, I have had several opportunities of seeing ulcers of the cornea. These may either arise from some slight injury or spontaneously. They are often central—that is to say, they occupy that portion of the cornea which is most remote from the vessels containing red blood. They are slow in their progress, and are not usually dangerous, but by producing more or less pain causing lachrymation and impairing vision, they naturally occasion much inconvenience, and require treatment. They are usually observed in delicate and weakly women, and the appropriate treatment may be summed up in two words—rest and tonics. The rest of the eye may be secured by the instillation of a two- or four-grain solution of atropine or of eserine, and the application of a pad of cotton-wool and a bandage; and the best tonic is quinine, one or two grains of which may be given in a glass of good sherry two or three times a day.

During lactation in women who are greatly exhausted, a very formidable inflammation of the cornea is apt to occur as a result of slight injury. I have seen several instances of it. The account generally given has been that in caressing the infant the eye has been scratched by its nail. Considerable pain and lachrymation with inability to open, or rather with spasmodic closure of the eyelids, are experienced. These symptoms increase for a day or two, and if the eye be examined at this period it will be seen that there is a linear ulcer, the margins of which are hazy, and that there is a considerable amount of conjunctivitis, and very frequently some chemosis, the swollen and semi-transparent œdematous conjunctiva occasionally protruding between the lids. At this period the eye, though in a dangerous state, may still be saved by rest, hot fomentations, good food, stimulants in moderate quantity, and quinine. But if the case has been neglected, or if it has been treated, as is too often the case, with rather strong solutions of nitrate of silver, the haziness of the cornea, instead of being limited

[1] Berichte und Studien aus dem König. Sächs. Entbindungs-Institute in Dresden, 1876. B. ii., p. 15.
[2] Monatsber. f. Geburts. B. xix., 1862, p. 1.
[3] Gscheidlen, Archiv. f. Gynæcol. B. iv., 1872, p. 112.

to the margins of the wound, becomes generally diffused, owing to the escape or accumulation of white corpuscles between its laminæ, and a yellow patch named *onyx* appears. The irritation of the little wound causes proliferation and detachment of the cells lining the inner surface of the cornea, and the escape of leucocytes into the anterior chamber, where, gravitating to the bottom of the aqueous humour, they form an *hypopyon*. Even yet, under careful and judicious treatment, and under favourable circumstances, recovery may take place, though a leucoma or white spot indicating the position of the damaged part of the cornea usually remains, and is irremediable. The next stage, if the disease progresses, is sloughing of the cornea. The whole thickness of this membrane becomes infiltrated with pus, the epithelium covering its surface becomes detached, it yields to the intra-ocular pressure, gives way at some point, allowing the escape of the aqueous and possibly of the lens, after which the chemosis and redness of the conjunctiva gradually subside, and the eye remains in an atrophied state. The symptoms of the later stages resemble very closely those, with which most practitioners are familiar, of the purulent ophthalmia of children. Pain is not a very conspicuous feature, but if present must be relieved by poppy fomentations, the application of belladonna, and the administration of opium, considerable doses of which are well borne. Operative procedures are rarely necessary, but if the tension of the globe be increased, paracentesis of the cornea may be performed with the view of allowing the escape of the pus in the anterior chamber, and between the layers of the cornea.

Another condition which I have noticed to occur frequently in pregnancy as a result of exhaustion, and which has been described by Mr. Hutchinson in a late number of the Ophthalmic Hospital Reports, is impairment of the power of accommodation, which is due to defective power of the ciliary muscle. It occurs in women whose eyes are perfectly healthy or emmetropic, but much more frequently and to a far greater degree in those who are hypermetropic, or long-sighted, especially if the hypermetropia be not sufficient to have led the patient to obtain the relief afforded by glasses. The patient complains that whilst her vision was, previously to her pregnancy, thoroughly good, she has lately experienced pain, redness, and lachrymation on attempting to sew or to read. Many women during the later months of pregnancy spend much time in preparing a variety of small garments, the sewing of which is examined with very critical eyes, and the neatness and precision of which are regarded as a duty. To give this up not only robs the patient of a pleasant occupation, but gives her leisure to reflect upon the various minor complaints of common occurrence at this period, which again depresses her spirits; and thus an affection trifling in itself may become the source of much trouble. To render the nature of this affection intelligible, it is requisite to refer briefly to the rudiments of our knowledge of the phenomena of refraction in the eye. In looking at a distant object, the rays proceeding from which may be regarded as almost parallel, no effort is required by the healthy eye. The eye is so constructed that, when at rest, parallel rays are naturally brought to a focus on the retina. But the rays from a near object are not parallel, they are divergent; and divergent to an extent proportionate to the nearness of the object to the eye. They would therefore, if the eye remained at rest, only be brought to a focus behind the retina. In order to bring such divergent rays to a focus, the method adopted in the human eye is to render the lens thicker, and this is effected, in a way I need not discuss, by the ciliary muscle. If the muscle, or rather, if the nervous centres, be deficient in power, then instead of the act of accommodation being reflex, or at least from long practice secondarily automatic, it becomes a voluntary one; an effort of the will is required to supplement the deficient power, and this soon tires, and the symptoms complained of by the patient are then experienced. It is easy to understand why the hypermetropic woman is especially liable to suffer from this affection. In hypermetropia the eye is originally by construction flatter than the normal eye. Hence an exertion of the ciliary muscle is required to focus even the parallel rays proceeding from remote objects; whilst in looking at near objects, as in reading or working, the patient has not only to exert that amount of accommodation which is performed by the healthy eye, but has to make the additional exertion required to compensate for the degree of flattening to which his eye is subject.

The treatment of this condition should be directed to the improvement of the general health of the patient by air, exercise, and tonics. Amongst the latter, small doses of strychnia deserve mention as being of special value. In cases of hypermetropia the adaptation of proper glasses is essential, and will, as a rule, at once remove all the symptoms complained of. Even in emmetropic persons there would be, I conceive, no harm in allowing the use of a pair of spectacles of feeble power, sufficient only to supply the nervo-muscular power that is defective, and to enable the patient to work or read. They might be discarded after recovery from confinement.

The following is an example of this condition. On October 28th, 1879, a woman came to me at Chatham complaining of the symptoms characterising asthenopia. She was twenty-seven years old; had been married five years, and had three children; the eldest was four years old, the second two and a half, and the third fifteen months. She suckled the first two for eleven months each, and had no trouble with her eyes; but the last child was still at the breast, and for some weeks past she had been unable to work or read without pain, redness, and watering of the eyes. The eyes were emmetropic or normal on ophthalmoscopic examination, and the fundus was healthy. She was directed to wean the child; moderate doses of strychnia and iron were ordered; and in a few weeks her symptoms had almost entirely disappeared.

(To be continued.)

ON MEDICAL CERTIFICATES OF INSANITY.

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(Continued from p. 679.)

Change in the higher emotions (*speech*).—Any alteration in the general emotional state of the patient should be recorded. Dr. Bucknill is of opinion that all forms of intellectual insanity are preceded by disturbance of the emotions. As a marked symptom of insanity, changed affections are exceedingly common. Often the object most loved when in health is hated most under mental impairment. Here is an example:—"She also tells me she would like to kill her husband, whom she calls a beast." These alterations are rarely mentioned in certificates, but they should be, as their value as symptoms is as great as any other that can be adduced.

Other abnormalities (*speech*).—This should include all other departures from the normal condition of the individual that may not have been referred to under the previous headings. The mode in which speech is uttered,—whether continuously, as in mania; slow and sometimes stuttering, in confirmed epilepsy; muttering, in dementia, &c. The tone being low in melancholia; often in monosyllables only, instead of sentences. The style being completely altered—such as swearing and the use of disgusting and obscene language, especially in cases of hysterical insanity, and associated, as it generally is, with amenorrhœa. Whatever the nature of the change it ought to be noted.

Conduct.—As a rule, the symptoms gathered from the conversation of the patient are confined to the medical man's own personal portion of the certificates,—the facts indicating insanity observed by himself. On the contrary, the majority of alterations noticed in the conduct, being "facts communicated by others," appear under the second heading. None the less important, however, are they on this account, as I endeavoured to point out in the early part of this paper. Some medical men do not avail themselves of this kind of information, and in omitting to do so I believe they make a great mistake. Like conversation, the conduct in insanity generally presents a striking contrast with the previous sane state. Cases occur where there is an entire absence of delusion or of serious impairment of the intellectual powers, whereas the demeanour and habits have undergone a marked change. These cases are said to be the subjects of moral or emotional insanity. In a case of this kind it becomes the imperative duty of the medical man to record *all* the facts he can learn showing or indicating any departure from the ordinary habits and conduct of the in-

dividual. In disorder of the intellect the presence of delusion is a proof of the disease; whereas in emotional disorder there is no such single well-marked symptom, and the only thing left for the certifier to do, is to accumulate all the facts he can, whether of a personal or of a hearsay character. These are the cases that not unfrequently appear in the law courts, when the medical witnesses too often find that their opinions differ *in toto* from those entertained by the lawyers.

A peculiar case of this kind is detailed in the following interesting certificate:—*Facts personal.* "I was obliged to be called up in the night (or early morning) to examine him, as he will not leave his bedroom all day, but is up cooking and eating almost all night; then sleeps during the day. I found him eating, but immediately I entered he commenced going in and out of his room, mumbling, refusing to finish his meal. He would not speak or answer any question, but carried a great many things into his room for the day, pacing the premises with quantities of food, eating more like a beast that had just been fed than anything human." *Facts hearsay.* "I had heard of his peculiar and dangerous ways for some years. He continually threatens his aged father, especially if not supplied with large pieces of meat; sometimes they have been obliged to give him a whole breast of mutton, which he keeps occasionally till it is bad, but he eats it just the same. He generally washes naked in the garden, and always persists in washing his own clothes. Also I have heard from many (including a policeman) of his raving and violence at night, and am quite of opinion that it is dangerous to have him at large."

Danger to others.—The certificate should contain a full account of any threat of or attempted violence, whether exhibited towards one particular individual, or of general turbulence and violence towards any one in the proximity of the patient. This latter condition is of common occurrence in acute epileptic mania. Insane persons who believe themselves to have been wronged, or who fancy themselves to be the objects of persecution, or who have auditory hallucinations, are all prone to attack the person whom they believe to be the author of the ills complained of. Of the dangerous impulsive violence of the confirmed masturbator I have already given a good example. Who could doubt that the man whose insane jealousy is described in the following certificate could be deemed otherwise than as disposed to acts of extreme violence towards his wife?—*Facts personal.* "Repeated accusations of infidelity on the part of his wife, even of incest against his son. Entertaining suspicions against every male person coming to the house — representing imaginary marks of men's footsteps on the premises, even of the clambering of feet on the wall below the windows to gain entrance for the purpose of illicit connexion with his wife."

Danger to self.—Of this symptom there are two kinds.

1. The patient having no suicidal motive, yet imperils his own life by various acts, regardless of consequences, and which would probably result fatally if unchecked. These acts are generally termed suicidal in certificates of insanity, but the difference between the two is a very wide one. The most common of these is refusal of food from various causes—e. g., from complete indifference, from the idea that it is poisoned, from the belief that it has been obtained by depriving others of theirs, &c. In one instance the patient who had persistently refused to partake of any food, at length gave as her reason, and uttered in very indignant tones:—"How do you expect me to swallow when I've got no throat?" One application of the stomach-pump acted physically in filling her stomach with food, and morally by assisting to remove her erroneous impression, so that the instrument was not required to be used a second time. The following instance of a female who had dismembered her left hand at the wrist joint belonged to this class, although in the certificate she was reported to be suicidal:—*Facts personal.* "She had an idea that she had hoarded up treasures, in consequence of which she gave an old coin to the parish poor-box, and came to me thinking it was wrong, and wanted medicine to get it back again." On this being sent back to be strengthened the following was added, "this being a delusion." *Facts hearsay.* By her sister, also her husband:—"To-day, 26th March, cut her left hand off because she thought it was Scripturally wrong, and also cut a cat's head off." The only reason for believing her to be suicidal was that of the act of dismembering, but her motive for doing this was a non-suicidal one, and it is in part alluded to in the facts communicated by her husband and sister. On her admission into the asylum the keynote of her motive was soon made apparent. She had recently lost a child, and after grieving over it for some time she became the subject of auditory hallucinations. She was constantly hearing voices speaking to her, many of them strange, but that of her lost child she perfectly recognised—in addition, she heard a number of peculiar sounds. She asserted, as her reason for cutting off her hand, that she had been told to do so by the voices, and that further it said in the Bible, "it was better to lose the left hand or right eye than be cast into hell." The Scriptural quotation was evidently the source of the primary suggestion of the act to the mind. It will be noticed that the personal facts related in the certificate in no way allude to the overt act, or to the causes which led to it.

2. The object of the patient being to commit self-destruction, I would urge upon all medical practitioners the necessity of regarding all cases of melancholia as having a suicidal tendency, whether or not there have been threats or attempts indicating it;—the depressing nature of the symptoms, if it does not manifest itself at first, always tends to develop it. The medical man should make the relatives understand this, especially if they are averse to sending the patient away from home to be treated. "Every case of melancholia should be looked upon as having a suicidal tendency."[1] "The first thing you are to remember is, that every patient of this kind—(i.e., the subject of melancholia) is to be looked upon as suicidal."[2] The mode of attempt varies considerably; some will take advantage of any occasion that presents itself. In the annual report of the Brookwood Asylum for 1868 I mentioned a marked case of this kind: "The patient first threw himself under the wheels of a cab, and was run over and most severely bruised; he then sat down on a fire; next he jumped from a three-storey window; he tried to strangle himself with a sheet; he swallowed a bottleful of soap and opium liniment; finally, after his removal to the workhouse, he inflicted a severe wound in his throat, and in this condition he was received into the asylum." He recovered. Others, again, will select one particular form. A patient of my own swam across a canal on purpose to commit suicide by placing his head on a rail in front of a passing train. Full details of any attempts at self-destruction should appear in the certificate. Patients will frequently deny having this tendency, and yet take the first opportunity of committing suicide. Any personal or hearsay facts at all bearing upon this important point should be detailed in the certificate. The following are some illustrative extracts:—*Facts personal.* "The patient appears in great mental distress, and is under the delusion that she has greatly neglected and injured her children. She wishes to destroy herself in consequence of this neglect." *Facts hearsay.* "That the patient has twice attempted suicide by strangulation within twenty-four hours."—*Facts personal.* "Melancholy views about religion; thinks he has committed sins which I have reason to know are only imaginary," &c. *Facts hearsay.* "Has repeatedly threatened to drown himself."—*Facts personal.* "Is silent, reserved, inert, and takes little or no notice of passing events.....Tells me he has strong inclinations to self-destruction. Takes most despondent views of his religious condition." *Facts hearsay.* "By his wife that he has twice attempted to make suicidal attempts, and that he has very restless nights."—"Her expression of intense agony of mind tending to acts of suicide"—a somewhat incomplete and illogical certificate. The case was one of acute suicidal melancholia, and well deserved an extended description of the symptoms.

Cases occasionally occur where danger to the patient may ensue from some act he has committed, which may not have been done for the express purpose of self-destruction, although the patient may have had a suicidal tendency. In the following example it was at first doubted whether the remarkable act of dismembering himself was or was not done with suicidal intent, but the patient subsequently admitted that it was done for the express purpose of making away with himself, otherwise the nature of the act led me at first to believe otherwise:—"He has lately complained of 'cloudiness of thought,' and feared he should lose his mind; loss of memory; has been without cause excited, singing and dancing at times, then soon depressed and melancholy; feared all his affairs and business were going wrong, and that no one

[1] Dr. Millar, Hints on Insanity, 2nd edit., p. 25.
[2] Dr. Blandford, Insanity and its Treatment, p. 191.

would employ him. Tells me he feels every now and then a confusion in the head which makes him unable to know what he is doing. Has cut off the penis with scissors while left alone for five minutes, and can give no reason for doing so."

Where a patient has threatened or attempted to commit any act causing danger to himself or to others, the certifier should endeavour to obtain from him a relation of what has been done by him, and the motive for doing it. The answers given frequently afford ample evidence of the existence of insanity.

Change in the higher emotions (action).—Any change of this kind would naturally be mentioned in connexion with the emotional alterations observed in the conversation. Such, for example, as the indifference a man exhibits towards his family, his domestic and business affairs, his personal condition, character, and comfort, so often observable in the insane, and affording such a striking contrast with his former state. Facts of this kind are exceedingly useful to the medical officers of this asylum, if noted in the certificate, as they undoubtedly should be. Some of these changes are almost pathognomonic of the form of insanity; for instance, the extravagant character of the purchases effected, and the lavish outlay of money, as contrasted with a totally different state of things in health, so often noticed in general paralysis.

Propensities.—Their condition, if abnormal, is of especial importance to record at length, more particularly in all cases of moral (frequently immoral) insanity. Sometimes there is marked change, at other times it partakes more of an exaggeration of the previous natural condition, and the development of puberty in the weak-minded and the viciously disposed is generally an anxious time for those related to them, as there is a great risk of the imperfectly-controlled sexual feelings leading them into mischief and trouble, and medical men are occasionally called upon to certify to such cases, who up to that period had been tolerated at home.

Masturbation is a frequent cause of insanity, and is often an accompaniment of epileptic mania. It is rarely alluded to in certificates. The following contains the whole of the facts related by the medical man in a case of this description:—"Is very strange in his appearance and manner, and cannot give any account of himself. He is totally unfit to take care of himself." This was a well-marked and typical case of masturbation, the demeanour, expression, dull and averted eyes, low tone of conversation, general monosyllabic answers, and occasional outbursts of impulsive violence, were all characteristic. Indecency in manner and gesture, dirty, destructive, and mischievous habits, should all be mentioned. The propensity to steal, so common in the early stages of general paralysis, should always be alluded to if present. The medical man must always bear in mind that all propensities that are apt to bring discredit on the patient or the family may not be brought under his notice, and may even be scrupulously concealed from him. Hence the greater reason for making very full inquiry into all these matters.

Last of all to notice is the habit of intemperance. While this is undoubtedly a fertile cause, it must also be borne in mind that such habits are sometimes the *consequence* of insanity, acquired or inherited; this is especially the case with the disease termed dipsomania, and in this it will be necessary for the medical man to investigate the entire history of the patient—the symptoms are very different to those cases of insanity caused by ordinary intemperance. In an instance of this kind, where there was strong hereditary predisposition, two uncles and the patient's mother having been insane, the following formed a portion of the certificate: "I have no doubt that, independently of drink, he is of unsound mind. He fancies that he is being robbed, and that people follow him about." The existence of delusion is not necessary to, or usually coincident with, dipsomania, but in this instance it materially strengthened the medical man's testimony.

General demeanour.—The general bearing of the patient should always be mentioned, such as the state of inertness or quietude, or the opposite condition of restlessness and excitement, and whether continued or intermittent. Some patients jump about, others have great rapidity of movement. Wandering from home without apparent purpose, or in consequence of a delusion, as, for instance, in the case of one of my own patients, who walked from Brighton to London to escape from fancied persecution—are all points of too great consequence to be omitted in certificates.

Other abnormalities of conduct, not noticed under preceding headings, such as the character of the handwriting, which undergoes such great modifications and alteration in general paralysis. Collecting and hoarding rubbish in the same disease should be always mentioned, as they are generally coincident with, and corroborative of, delusions of grandeur.

(To be continued.)

WOUND TREATMENT.

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THIS question having led to much writing and discussion recently, I am induced to add to what has already been stated, a few remarks, the outcome of a somewhat varied experience in wounds and their management.

Commencing with water-dressing and no dressing, passing to the hyposulphites and Lister's method in its earlier years, returning to a simple cleansing-dressing of some antiseptic solution, and finally ending with Lister in its entirety,—from this experience I have endeavoured to formulate some system by which my cases may yield as good results as may be expected in the present state of surgical knowledge.

Mr. J. Holmes in a paper some years ago, the date and periodical I do not recollect, summed up a communication upon this subject by giving us a "trinity of healing graces," much preferable, in my opinion, to those more recently suggested by Mr. Sampson Gamgee ("rest, position, and pressure"), because more comprehensive; they were "rest, cleanliness, and drainage." I believe that by a firm conviction and by a complete recognition of the importance of each factor, and by due attention to the details necessary under each heading, can we alone hope to obtain that success we all aim at. This was the feeling left upon my mind at the time I read the paper referred to, and I felt that the writer had pointed out the line to take in future surgical work. I have endeavoured since so to govern my actions that I should not attach undue importance to either one to the detriment of the other two.

Rest and cleanliness, I find, we can secure best by the same process—Lister's method. Much has been said against its adoption, but those who have fairly and impartially worked for a sufficient time the principles laid down by Mr. Lister to enable them to become educated to the system, cannot fail to see the efficacy of its action. Whether the germ theory be true or not, as a matter of fact, the knowledge is forced upon me that wounds do better by this method than by those I have used or seen applied by others. The numerous objections urged against Mr. Lister's principles include cost and trouble incurred. Neither, however, in my opinion, is sufficient to prevent its use when its efficacy is established. As to cost, the experimental year (1876) in the General Hospital in this town, where I was then house-surgeon, led to no appreciable increase in the drug account. This much can be said, even if we dare not assert that it led to an actual saving after all sources of possible error had been removed.

When the rudiments are acquired, and the individual educated in its working, I doubt if the sum total of time expended over any single case is in excess of that which would be given up to it under other forms of dressing. This I state, having myself gone through the steps requisite for obtaining a knowledge of the process, and carried it out there and in my practice here since the date of its introduction into the General Hospital. That it is a disadvantage, or that harm is likely to accrue from the wounds being hidden from sight, I fail to see, the thermometer giving us early enough evidence of anything calculated to retard the healing process; at any rate, the balance is in favour of the rest and cleanliness insured by its use. Providing the importance of all the "graces" be recognised, a lower temperature is recorded than is usually the case under open methods of treatment. This opinion is based upon the year's experience, before referred to, set apart by the staff to test the value of Lister's system.

What has been said in connexion with the use of carbolic gauze and spray I am inclined to state, but based upon

much more limited experience, of thymol. The gauze is less harsh, and therefore more comfortable to the patient, and its antiseptic properties do not appear to be less than is the case when carbolic acid is the active agent. It is certainly less an irritant than this latter product. I have noticed that if a dressing of, say a week's standing, is removed, the discharge is greenish in colour. What the change is due to I am not aware, and it does not affect the healing process. All cases in which I have used this kind of application have done well. (I append a special instance.)

By the use of antiseptic surgery in its entirety we gain effectually the first of our "graces"—*rest*,—because of the lasting nature of the dressing, it being a not uncommon thing to allow an amputation or other major operation to run a whole week after the first dressing without interference of any kind. By the pressure, gentle but effectual, given by the gauze dressing, we secure an additional power of some value in maintaining the surfaces in apposition, and limiting, if not preventing, the muscular tremor so common after operations, such as amputations or excisions, leading to unnecessary suffering to the patient and protracted healing. I might mention here perhaps the value of Child and Hinds' bed-lift, especially in children's work. By its aid a patient can be lifted to perform defecation, &c., without any disturbance of the stump, or in cases of excision of hip with little or no suffering. It is also a great assistance in attending to the back, &c., when bedsores are present or threatened. Much harm is often done inadvertently by nurses in raising patients for necessary purposes, but by the use of the lift the surgeon is sure of safety from this source of disturbance.

If freedom from fetor, with very often only a discharge of lymph, or at the most a healthy, inodorous pus, may be considered evidence of "cleanliness," this is also gained by the same measures.

When antiseptic surgery is not adopted, and in wounds of a foul and sloughy nature, terebine has proved of great service. The sponge-dressing of Mr. Jordan seems also to be worthy of more notice. Drainage, and of the three perhaps I may say this is of chief importance, as by a failure to recognise its claims all hope of any good result must be abandoned. The relief of primary tension, a fruitful source of evil, by obtaining a free escape of serum, the first product we have to deal with after any surgical injury, cannot be insisted upon too thoroughly, as too often that which might have been a rapidly-healing process is rendered tardy, if not unsatisfactory, in other ways. The means for gaining this end are position and special apparatus. It is my custom to raise all stumps for a few hours (six or more) into a position calculated to lessen oozing, and at the end of this time to remove all pillows, allowing the limb to choose its own posture, providing it rests upon the same plane as the trunk. By these means drainage is facilitated and the flaps are kept more accurately apposed to one another. A position such as this, not raised or depressed, is, in my judgment, preferable, because more comfortable to the patient and less likely to interfere with drainage or lead to hæmorrhage, as might be the case if the stump were depressed.

Metal tubing, horsehair, and catgut are the special means we should, I think, employ, each having special advantages over the other in various conditions. The caoutchouc is now out of date and cannot claim to be a rival to either of those mentioned, on account of the deleterious products introduced with it, rendering discharges fetid and leading to an inevitable rise in temperature. Often have I pointed out this circumstance, which Mr. Chiene was the first to write upon, and on which account he substituted for it the catgut drain. In addition to the above objection, if used in a sinus the channel does not long remain patent, the sides of the tube collapse and become flattened by the steady pressure of the walls. Metal tubing is extremely useful, and is especially adapted to those conditions where no counter-opening exists and long-continued discharge is expected: for instance, in large abscess cavities or sinuses leading to bone. I also find it of good service in glandular abscess of the neck, so common in children. If an early opening be made and the finer tubing employed, little or no scarring remains. Hair drainage, originally suggested by Mr. Joseph White, of Nottingham, follows next; and from a very large experience of its use both in my own practice at the Children's Hospital and in cases under my immediate observation whilst an official at the General Hospital, I am prepared to state that it cannot be improved upon. From the fact of its unchangeable nature, ready adaptability, ease of reduction in size, together with the absence of pain from frequent removal for cleansing purposes—needed by the tubes employed—and from its durability, it is placed far before any other form of drainage in use by surgeons. By capillarity fluids are removed with freedom.[1] This experience was gained in Mollière's practice at Lyons. If the healing process be a rapid one, hair is no hindrance to it; and if prolonged, we secure a satisfactory exit for the products entailed by this delayed union. A practical hint may here be given, that all the hairs chosen for a particular drain should be of the same length, otherwise one, shorter than the remainder, may be left in the wound, leading to annoyance to the surgeon and unnecessary suffering to the patient. The catgut-drain is of service when rapid union may be confidently expected, but often fails from early absorption when we require it most. It also proves valuable if introduced between the sutures at one or more dependent points. This course I adopt at the first dressing, which in an amputation of the thigh would probably be done on the second or third day, being requisite somewhat earlier than the future ones on account of oozing after operation. Moreover, at the time it is difficult in this class of operation to select which will be the most dependent point, if, on account of rest being perfect, the stump be allowed to choose its own posture, as before advised. The introduction of these accessory drains is certainly a great safeguard.

The means used for arresting hæmorrhage are calculated to affect union materially. With catgut and torsion, why surgeons adhere to the silk ligature (Gamgee) I am at a loss to know. After the substitution of the two former for the latter in the General Hospital, secondary hæmorrhage, previously no uncommon occurrence, became a rare event. Acupressure may prove serviceable under very exceptional circumstances. For sutures, wire, alternating with horsehair, when traction is too great for the latter alone, will give us more help and less damage than silk. Horsehair, if it can be used alone, leads to less discomfort and irritation than either wire or silk, there being no need to interfere with hair sutures until the healing is completed. Catgut as a suture, from being so readily absorbed, is insecure, and has no advantage over horsehair.

From these remarks it will be gathered that Lister's method is, in my opinion, more beneficial than any other system, and that the practice in Nottingham is decidedly in favour of its adoption, may be inferred from the fact that after the determination of the surgical staff at the General Hospital to give it a fair trial for one year, the verdict was unanimous that its continuance was desirable. I know I am correct in saying that the surgical records during that year and since compare favourably in every way with those previously published. Septic disease has been practically abolished where before it was too common. Although this evidenced is not entirely to be put to the credit of antiseptic surgery, on account of vast improvement in ward management and general hygiene, with complete remodelling of the drainage taking place at or about the time of its introduction, still it led to the abolition of those diseases which had been reduced to a minimum by the general improvements. In an old hospital, very imperfect in structure, where free ventilation with comfort to the patient can with difficulty be obtained, and the cubic space small according to modern requirements (1536 feet per bed), this alteration may be considered highly satisfactory.

That, under certain conditions with simple dressings, which insure chemical cleanliness, free escape of discharge, and rest, good results may be obtained, I do not doubt; but if the preference be given to any one system I should select Mr. Lister's, because it enables us to gain most easily and effectually that required of us by our general principles embodied in the "trinity," and does not call for undue expenditure either of time or money.[2]

I would, in conclusion, again point out that perhaps of all things in connexion with treatment of wounds relief of primary tension is of first importance. Tension and pus too often stand directly in relation to one another as cause and effect. Insure the absence of the former, and the latter will be less frequently met with in the healing process. I add to

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[1] Vide "Etude sur le Drainage capillaire par les Crins," par Charles McRae, M.D.

[2] As before stated, it is rather by a recognition of the importance of all three factors we shall gain the success we desire, than by pinning our faith to any special method which, whilst yielding all we seek for under one heading, fails to give what we require under each of the others.

this a case occurring in my practice lately illustrative of what I have herein stated.

A. S——, aged ten years, admitted July 23rd, with a sarcomatous tumour at the lower end of the fibula. Amputation by Stokes' modification of Gritti was done on the afternoon of August 23rd, the patella being secured to the end of the femur after removal of cartilage by two wire sutures passed through the periosteum. A long anterior flap, containing the patella, was made, and a shorter posterior one. No undue bleeding occurred; two vessels, popliteal and another, were tied with gut and several branches twisted. A horsehair drain was passed beneath the femur between it and the lower flap, and brought out at the upper end of incision on either side. Wire and horsehair sutures alternating brought the flaps together, the former being about an inch apart, and the latter midway between them. Thymol spray was used, and thymol gauze-dressing lightly applied. The temperature rose the morning after operation to 103° F., and was probably accounted for by the drain from its situation acting imperfectly; the position of the stump was altered at once, being laid on the same plane as the trunk, a small pad being placed beneath the thigh to prevent pressure on the line of incision behind. These measures led to a fall of temperature the same night. On August 25th the temperature in the morning was 100°. General condition good. Dressed for the first time, on account of oozing having penetrated to the surface; edges apparently united; on the outer and lower side, at the most dependent point, a probe was carefully passed to separate the edges, and a few strands of catgut pushed in. There has been no discharge beyond serous oozing. Bowels open naturally. From this date to August 30th the temperature varied from 99° in the morning to 100° in the evening. On August 30th the wound was dressed for the second time, a very small quantity of lymph being the only discharge noticeable; no odour, tenderness, or redness; hair-drain partially removed. Between Aug. 30th and Sept. 6th temperature remained in the morning at normal, never exceeding 99° in the evening. Dressed for the third time on Sept. 6th. All the drain but two or three hairs removed. No pus. Two wire sutures taken out; layers of gauze reduced; discharge the same in character. Temperature rose the same evening to 100°, due to handling and removing of drain; fell, however, next morning to normal, and remained so. On the 13th the wound was dressed for the fourth time, the few remaining hairs removed. All the edges firmly united. Patella appears to be fixed.

This is an account of the last dressing up to the present time, but there is no doubt as to the complete success of the case, and the principles supported in this paper are sufficiently illustrated by this brief record. The alteration in position in this case was delayed in consequence of my not having given special directions to the nurse to take that course before my morning visit.

Note.—By a judicious use of gauze, and by recharging, the expenditure can be reduced considerably. It is not commonly the practice, I think, to employ the same lotions for very many cases; this can be done with safety, although perhaps to the ignorant observer it is not a very cleanly procedure. The "hat-lining" will also serve for numerous dressings. The recharging more than compensates for the cost of carriage of gauze to Edinburgh for this purpose.

ON

VERSION, FORCEPS, AND THE EXPECTANT PLAN IN THE TREATMENT OF CONTRACTED PELVIS.

BY WILLIAM T. LUSK, M.D.,

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(Concluded from page 650.)

IT is obvious from the foregoing description that version and extraction in contracted pelvis expose the child to perils of no insignificant character. Among the lesions which have been observed as a result of the extreme traction force necessary to bring the head rapidly through the narrow brim, are fracture of the clavicle, fracture of the humerus in difficult arm deliveries, lacerations of the sterno-cleido-mastoid muscles, rupture through the substance of a vertebra, extravasations of blood into the cavities of the head and trunk, separation of the condyle from the occiput, and of the squamous portion of the temporal from the parietal bones, fractures and depressions of the skull, and rupture of the sinuses of the dura mater.[1] To be sure, many of these accidents are not inevitably fatal, but they do not by any means furnish the chief sources of danger. These result partly from the respiratory efforts which are always excited by delay in extracting the after-coming head, and partly from the depressing influence exercised upon the fœtal heart by pressure brought to bear upon the base of the brain.[2]

Having thus made out with great care a full bill of particulars embracing all the acknowledged drawbacks to the performance of version in narrow pelvis, we have next to consider how far these associated evils tend to invalidate the claim of version to be regarded as *facile princeps* among conservative measures of treatment. The following records of the individual experience of competent operators will help us to solve this question. Korrmann[3] turned in nine cases of contracted pelvis. Seven children were born living, and two died. All the mothers recovered. Löwenhardt[4] turned in twenty cases of contracted pelvis. Seventeen children were delivered alive, and three died. Only children that outlived the first week were counted in the successful cases. The mothers recovered. Goodell[5] reports eleven cases. Seven children were alive at birth, and four were stillborn, but of the latter one was delivered through a pelvis measuring only two inches and a half conjugate diameter, and in one the case was complicated by eclampsia. The mothers recovered. Now, not to go beyond these forty cases, we obtain as the result of version thirty-one living infants, without the sacrifice of a single mother. A number of the women were delivered by version of living children in whose previous labours craniotomy had been found necessary. Löwenhardt placed in contrast his own experience with the forceps in narrowed pelvis presenting degrees of contraction corresponding to those in which he had resorted to version. Of forty-five deliveries sixteen children were born dead and five died shortly after birth. Of the mothers three died, while twenty-one suffered from puerperal affections of greater or less severity.

Now, if the foregoing testimony represented the entire truth, there would be no good reason for discussing other plans of treatment. They, in fact, show only how far special training and experience will enable an operator to overcome difficulties by dexterity and address. In the first case reported by Dr. Goodell the child was still-born. In commenting upon the cause of death, Dr. Goodell states frankly, "Much force was needed to extract the head, but it was not made as promptly and efficiently as I have since learned to make it."

Another side of the question has been presented by Borinski,[6] who, at the instigation of Professor Spiegelberg, collected the statistics of version in contracted pelvis from the Breslau Clinic, between the years 1865–1872. In all there were ninety-three cases. Thirty-four children were saved and fifty-nine were delivered dead, or died soon after birth. Fifteen mothers lost their lives. This seemingly disastrous showing is capable, however, to a certain degree of explanation. Thus twenty of the fifty-nine children born still died before version was attempted. In nine of the cases the transverse as well as the conjugate diameter was materially diminished. Of the children delivered through these flattened, generally contracted pelves, only one, and that a very small one, was extracted alive. Still there were fifty-eight cases of version in ordinary flattened pelvis, with the result that just one-half of the children were born dead. In only three of the fifteen mothers who died was the fatal result apparently connected with the operation. In the others, death was due to spontaneous rupture of the uterus, placenta prævia, and nephritis, version having been resorted to because of these complications. A considerable

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[1] C. Ruge, Verletzungen des Kindes durch Extraction bei Becken lage Zeitschrift f. Geb., Bd. i., s. 68.

[2] Dohrn, Ueber Pulslosigkeit des Kindes Während Extraction an den Füssen. Arch. f. Gyn., Bd. vi., s. 265.

[3] Arch. f. Gyn., Bd. vii., s. 13.

[4] Wendung und Extraction das dominiren de Verfahren bei Becken Enge. Arch. f. Gyn., Bd. vii., s. 421.

[5] Trans. of the International Med. Congress, Phila., 1876, p. 777.

[6] Zur Lehre von der Wendung auf die Füsse bei Engem Becken. Arch. f. Gyn., Bd. iv., s. 226.

allowance should be made, too, in the cases from the Breslau Clinic, from the fact that the great part of them took place in the out-department of the hospital, where they were under the charge of midwives, who rarely send for timely aid except in the presence of dangerous complications. In eighteen instances the operation was performed on account of prolapsus of the cord, and in eighteen instances because of some maternal affection.

In presenting this less favourable side of version in contracted pelvis, it is well incidentally to place in juxtaposition the result of the high forceps operation as given by Dr. Harold Williams in a recent number of the *American Journal of Obstetrics* (January, 1879). Williams collected 119 cases where the forceps were applied to the head above the brim, reported since 1858. Of the mothers nearly 40 per cent., and of the children over 60 per cent. perished. The mechanical objections to the use of forceps at the brim are obvious. When the head is moulded to the contracted pelvis by the natural forces, the head passes the conjugate with its long diameter in the transverse diameter of the pelvis, with the two fontanelles on nearly the same level, and with the sagittal suture looking towards the sacrum. The posterior parietal bone rotates around the promontory, the latter producing a furrow which runs either along the coronal suture, or, at first, in front of the parietal boss, and later, as flexure occurs, forward towards the frontal bone. The bi-lateral compression of the head is compensated for, in part, by a lengthening in the fronto-occipital and partly in a vertical direction. Forceps applied in the transverse or oblique diameter of the pelvis prevents this latter compensation from taking place. They increase the width of the head, and thus add to the difficulty of passing the conjugate. Often they disturb further the normal head mechanism by causing premature flexion and rotation to take place. In each of these ways they augment the difficulties of delivery, and render necessary the employment of an increased amount of traction force. With forceps applied directly to the sides of the child's head I have no experience, but Dr. Goodell, who has clearly pointed out the objections to this method in contracted pelvis, has shown that they inevitably produce flexion, and cause the large bi-parietal diameter to pass through the narrow conjugate. So long as the head does not engage at the brim there is no rivalry between version and forceps. The latter should be placed under the ban as hardly less dangerous than the Cæsarean section.

Now, let us suppose that after rupture of the membranes it is decided to resort to neither forceps nor version, but to adopt an expectant course, until circumstances arise which shall render active interference necessary. It is certain that a very considerable portion of labours in contracted pelvis terminate spontaneously. Winckel[7] reports 23 cases in the Dresden Maternity in 1873, and 12 cases in 1874 and 1875. Of the 35 cases, two mothers and three children died. Osterloh[8] reported 139 cases from the Leipsic Maternity between the years 1863–1872 inclusive. There were 105 cases where the pelvis measured from three to three and a half inches. Of 106 children seven died, of the mothers four died. In 34 cases where the pelvis measured over three and a half inches, two children died. All the mothers recovered. There were, however, 42 cases in all of puerperal disease terminating in recovery. Borinski reports from the Breslau Clinic 233 spontaneous deliveries in contracted pelvis, with 192 living children. There were ten maternal deaths, but four were from non-puerperal intercurrent affections. Thus in three large Maternity Hospitals there were in cases of contracted pelvis 407 spontaneous deliveries, with the loss of fifty-three children, and, from puerperal diseases, of twelve mothers—the latter representing very nearly the usual mortality in lying-in hospitals. Even in a pelvis measuring less than three inches, now and then the spontaneous delivery of a small living child takes place.

If we examine these results we find that under favourable circumstances, in all but the extreme forms of pelvic contraction, nature will do her own work with the least expense of infant life and with a relatively small maternal mortality. On the other hand, the long-continued pressure upon the parturient canal, incident to the moulding and adaptation of the head to the narrow pelvis, yields a large contingent of inflammatory affections, which complicate the puerperal period and protract the convalescence. By favourable circumstances I mean a presentation and position of the child's head suited to the form of the pelvis, and a sufficient degree of uterine activity. Rectification of a faulty position of the head after the rupture of the membranes is always a matter of difficult accomplishment. In case, therefore, the brow presents, or the head engages with an excessive degree of lateral obliquity (sagittal suture looking forward towards the pubis, or backward above the promontory), in place of wasting time in futile efforts at correcting the malposition, version should be promptly performed. In prolapse of the cord, which occurs in about six per cent. of the cases, the indication would clearly be version rather than replacement. In eclampsia and face presentations most operators would preferably resort to version.

Thus we have finally the field of controversy between version and other plans of treatment narrowed down to cases in which, after rupture of the membranes, the head remains above the brim; but the conditions are such that nature is capable of overcoming the mechanical difficulties of delivery, providing that the labour pains are sufficiently energetic. There is always an element of chance in this last condition which, however, is an essential one. If the pains are weak and powerless, it may be possible, even hours after rupture of the membranes, when the head has not become fixed, to still accomplish version. More frequently, however, as the head but incompletely fills the lower segment of the uterus, the waters escape, the uterus retracts upon the fœtus, the cervix becomes œdematous and tender, and after a time the temperature and pulse rise, betokening the presence of danger. Sometimes the retraction of the uterus ends in the withdrawal of the cervix over the child's head, and in the failure of the latter to descend into the pelvis the vagina is drawn upward, and subjected to a perilous degree of tension. It is easy to see that under such circumstances the time for version is past, and craniotomy is called for. Because, therefore, where labour is left in contracted pelvis to the spontaneous efforts of nature, in a certain proportion of cases, the insufficiency of the labour pains leads to the necessity of sacrificing the child, there will always be operators who, confident in their own skill, will prefer to turn soon after the rupture of the membranes, that they may keep in their own hands the control of the delivery. The bulk of professional men will, on the contrary, so long as spontaneous delivery is probable, prefer to wait, even though by so doing they may eventually find themselves obliged to fall back upon the perforator and the crotchet.

When the delivery of the child is left to the contraction of the uterus, reinforced by the expiratory muscles, the physician should assume the *rôle* of a watchful spectator. Safety to the mother and the child requires that the time of the passage of the head through the bony canal should not be too prolonged. So long as the head descends steadily, however slow the progress may be, in case no complications demand speedy extraction, the physician should await the results of uterine activity. Should the pains grow weak and inefficient they may be stimulated by the uterine douche, the introduction of the catheter into the uterus, and by small doses of ergot, or the viscum album, provided the inertia is not the result of pathological changes in the uterine tissue.

When the advance of the head ceases, either from failure of the pains, or, as in justo-minor pelvis, from the growing resistance of the pelvic outlet, the rule should be to relieve the soft parts of the mother as speedily as possible from the pressure of the child's head. Pressure too long continued ends in œdematous swelling, softening of the tissues, arrest of circulation, necrosis, and gangrene. When the integrity of the lower segment of the uterus has been impaired to any considerable extent, perforation should be resorted to, and the child sacrificed to the interests of the mother. If, on the contrary, the changes are insignificant, and the mechanical difficulties not insuperable by the use of forceps, it may be possible to save the life of both mother and child. But to avoid the first-named cruel alternative the forceps should be applied as soon as the requisite conditions for their employment are reached.

Of course, as forceps are solely to save fœtal life in case the feeble heart-action of the child gives warning of impending asphyxia, the more the interests of the mother are to be alone consulted.

In estimating the mechanical difficulties to be overcome by the forceps, it is necessary to determine how far engagement has taken place. Litzmann[9] recommends, by careful

[7] Berichte und Studien, 1874–1876.

[8] Einige Beiträge zu den Spontan Verlœufenden Geburten bei Engem Becken, Bd. iv., s. 520.

[9] Ueber die Behandlung der Geburt bei Engem Becken. Sammlung Klin. Vorträge, s. 715 et seq.

internal examination, combined with external palpation, that the physician ascertain both the size of the segment of the cranium below the brim and how much of the head remains to undergo compression before it can enter the pelvis. In ordinary flattened pelves, Litzmann found that in three-fourths of all the cases the pains alone sufficed to overcome the resistance of the brim. When the head had so far descended that the sagittal suture had passed from three- to four-fifths of an inch below the promontory, and the boss of the anterior parietal bone could be felt with ease behind the symphysis pubis, extraction with the forceps was a task of no great difficulty, even if before their application flexion had not begun to take place.

In generally contracted flattened pelvis it is desirable that the head should be transverse and well flexed, with the posterior parietal bone at least three-fifths of an inch below the promontory. With the forehead and occiput resting upon the side walls of the pelvis, the sagittal suture near the promontory, and an ear felt behind the symphysis pubis, the prospects of forceps operations are extremely dubious.

In justo-minor pelvis of moderate extent (conjugate three and a half inches) the failure of the pains, which forms the necessity for forceps, is rather the result of the paralysing effect of the pressure of the bony canal upon the entire circumference of the cervix than of the absolute degree of pelvic contraction. The head descends in a state of complete flexion with the large fontanelle at the pelvic brim. If, as the head advances, the small fontanelle moves from the median line, and the large fontanelle becomes accessible to the finger, it is likely that the pelvis widens towards the outlet. If the forceps serve only to bring the fontanelle down still deeper, and to increase the declivity of the sagittal suture, the opposite condition obtains,[19] which may frustrate the delivery.

In flattened pelvis the forceps should be applied as nearly as possible to the fronto-occipital diameter of the head, as the latter needs to descend in the transverse diameter of the pelvis. When applied obliquely they tend to cause premature rotation, which increases the difficulties of extraction. In justo-minor pelvis the direction of the blades is of less importance, as the head often descends spontaneously in an oblique diameter. Success in high forceps operations depends upon the degree of accuracy with which the tractions are made in the axis of the pelvis. With the long curved forceps it is especially difficult to fulfil this requirement at the superior strait. Even when the directions to draw vertically downward are faithfully carried out, a considerable portion of the force is expended in the pressure of the forceps upon the soft tissues lying between them and the anterior pelvic wall. In careless hands this pressure is capable of inflicting a great deal of injury, particularly where the blades of the forceps are passed within an imperfectly dilated cervix, and where they project somewhat beyond the child's head. Various devices have been invented to correct this defective working of the instrument. Pajot recommends placing the left hand upon the lock to make pressure backward, while with the right hand tractions are made downward and somewhat forward. I have generally succeeded by exerting a small amount only of force at each traction, watching at the same time with great care the direction of the blades in the pelvis. This method is pretty safe, and in the end generally successful, but often requires a very considerable outlay of time and patience. A pair of straight forceps, as recommended by Dr. J. E. Taylor, will often enable one to draw more directly in the axis of the brim, and will succeed where the curved forceps have had to be abandoned. Of late I have been in the habit of using the Tarnier forceps in high operations, and am able to give them my cordial approval. The blades always swing in the transverse diameter of the pelvis, while the traction force is exerted as nearly as possible upon the centre of the child's head. A few trials will convince the most prejudiced opponent of the Tarnier forceps that they will, at the superior strait, bring the head to the floor of the pelvis in much less time, and with a less expenditure of force, than can be accomplished by other methods.

The dangers from forceps in contracted pelvis are due, not so much to the pressure they make directly upon the child's head and the pelvic walls, as to the compensatory bulging of the head in its transverse diameter. When the head is fixed at the brim, and forceps are applied to the forehead and occiput, it is evident that the only change of form that can take place is in a vertical direction. Safety in delivery requires that there should be no sudden augmentation of the bilateral pressure, which would necessarily deepen the furrows made by the promontory upon the posterior lying parietal bone, and imperil the integrity of the maternal tissues confined at the conjugate between the promontory and the pelvis. Until, therefore, the head has passed the narrow strait, tractions should be made with moderate force, and with short periods of intermittence. After the head has once descended to the floor of the pelvis the forceps should be removed, and the head be allowed to rotate into the conjugate. Then forceps of any pattern may be adjusted to the sides of the head should further aid be required to complete delivery.

So far we have considered cases in which the cervix was sufficiently if not completely dilated before rupture of the membranes. If, as is very common, the membranes rupture prematurely, the difficulties and risks to both mother and child are greatly increased. With rupture comes, as we have already seen, escape of the amniotic fluid, retraction of the uterus, and interference in the utero-placental circulation. With an undilated os externum the cervix is stretched by the head, and its thinned tissues are subjected to pressure from the symphysis and promontory. Delay leads to arrest of circulation and necrosis at the points of pressure, but here version and forceps are alike impracticable. This leaves as the only alternatives, perforation and the Cæsarean section. Timely aid, therefore, in such cases should be extended before a dangerous condition is reached. My first preference just after rupture is the Barnes' dilator, which not only serves to expand the cervix, but when employed promptly helps to prevent the escape of the amniotic fluid. Next to the Barnes' dilator, and of special utility when the waters have already escaped, I would place the long narrow-bladed forceps of Dr. Taylor, for introduction through the undilated os. With these the head can be grasped, and when made to descend and then allowed to recede in alternation, oftentimes the rounded cranial surface will efficiently act as a dilating body, and secure such a degree of expansion as will pave the way for the safe adoption of other methods of delivery.

[19] Op. cit., s. 715.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

THROAT DEPARTMENT.

(Cases under the care of Dr. POORE.)

Epithelioma of the Upper End of the Œsophagus.—R. S——, a charwoman, aged sixty, first attended on March 1st, 1877. She was much emaciated, and stated that since Christmas she had had a difficulty in swallowing which had gradually increased. Attempts at swallowing produced fits of coughing. There was some pain between the shoulders. She had spat blood on two or three occasions. She had miscarried three times, one child alive and delicate, one stillborn. On examination the epithelium of the tongue was patchy, thick in places and thin in others, and the pharynx was slightly congested. There was decided prominence of the larynx, and slight and doubtful enlargement of glands at angle of jaw. The larynx appeared healthy when examined by the laryngoscope, but between the arytenoid cartilages and the pharyngeal wall muco-pus was seen exuding. On passing the finger into the pharynx an obstruction was felt at the upper part of the œsophagus, and a speck of blood was found on the tip of the finger on withdrawal. The examination caused the patient to cough, and she expectorated some blood and a small fleshy particle which, when examined under the microscope, revealed nests of epithelial cells quite characteristic of epithelial cancer. The patient was advised to become an in-patient, but on her

declining to do so she was ordered a morphia linctus to ease the discomfort of the throat, carbolic-acid lozenges to counteract the fetor, and cod-liver oil in large doses. After a time she ceased to attend.

Remarks.—The interest of the case consists in the certainty of the diagnosis at the first visit by means of the microscope. The appearance of the tongue and the history of the miscarriage rather pointed towards syphilis, but the discovery of the structure of epithelioma in the expectorated particle left no doubt as to the true nature of the case.

Tumour, as big as a hazel-nut, growing from the Left Ventricular Band.—W. W——, aged forty-eight, a workhouse master, was sent into the hospital on the 18th July, 1878, suffering from hoarseness and dyspnœa. He had been a healthy man, with the exception of an attack of gonorrhœa. His wife had miscarried three times, but there was no direct evidence of syphilis. The patient stated that he had been liable for some time to a relaxed sore-throat, that he became hoarse somewhat suddenly about a year ago, and that during the last month his symptoms had very much intensified. On July 25th he was seen by Dr. Poore, and subjected to a laryngoscopic examination. The dyspnœa was increased when the patient extended his neck for the purpose of laryngoscopy, so that the examination was not easy, and had to be performed with all possible quickness. A tumour was distinctly visible on the left side of the larynx at its anterior part, and situated, as was thought, below the left vocal cord; the left cord being apparently stretched over it like a shining band. The breathing was stridulous during both inspiration and expiration, and on applying the hand over the thyroid cartilage a distinct vibration could be felt during both respiratory acts, especially on the left side. There was a considerable amount of tenacious glairy sputa. All the extraordinary muscles of inspiration were used, and there was some swelling of the feet. There was no prostration, and no cyanotic tint of face.

He was placed on large doses of iodide of potassium, on the chance that the tumour might be of syphilitic origin; but no improvement having taken place in two days, it was decided that an operation was necessary. In consultation with Mr. Marshall it was decided that no attempt to remove the tumour *per vias naturales* would prove successful. The base appeared to be nearly as thick as the growth itself, and the inability of the patient to submit to more than a momentary laryngoscopic examination, together with the fact that the tumour completely closed the forepart of the glottis, would have rendered the passing of an écraseur over the growth impossible; and any attempt to do so was not thought either desirable or justifiable. It was considered, therefore, that thyrotomy would be the proper operation; and it was resolved that tracheotomy should be first performed, that the thyrotomy should be done subsequently after the lapse of some days, so as to give the patient time to recover from the shock of the first operation, and to allow of the second operation being performed with greater deliberation.

Tracheotomy was performed with all possible skill by Mr. Bond, the house-surgeon, but the patient never rallied afterwards, and died in a few hours.

On post-mortem examination the mucous membrane of the larynx was found to be considerably injected, especially at the upper and left part. Attached to the left ventricular band at its forepart was a smooth, lobed, hard growth as big as a hazel-nut, and with a broad base. It was of a pinkish colour, and marked on its upper surface by a white streak. This appearance had led to the idea of its being situated below the cord. A microscopical examination by Mr. Boyd, the surgical registrar, showed the growth to consist principally of bloodvessels with small round nucleated cells between them, and some few spindle-shaped cells.

A Cockle-shell in the Trachea.—T. M——, aged eight, was sent to the Throat Department for examination by Mr. Godlee, by whom he had been admitted into the hospital, with a view to operation. It appeared that on the 4th of July the boy was playing in the Regent's-park, when a small cockle-shell, which he had picked off the path and placed in his mouth, accidentally slipped into his windpipe. The boy was suffering from some dyspnœa, with slight recession of the thorax during inspiration; both inspiration and expiration were accompanied by bronchitic râles, audible all over the chest. The boy pointed to the trachea as the seat of his trouble, and pressure on a spot about one inch above the sternal notch caused him pain. He was troubled occasionally by fits of spasmodic coughing. He was a timid, fidgety lad, and by no means a good subject for laryngoscopic observation. On July 10th, after much trouble, a momentary glance of the larynx was obtained, and a white body was seen below the vocal cords. On the following morning a further examination was made, and a white body was distinctly visible on the anterior wall of the trachea, about an inch below the vocal cords. While endeavouring to demonstrate the presence of this foreign body to one of the students who was present, the patient was seized with a very violent attack of coughing, and coughed up a small cockle-shell nearly as big as a threepenny piece. The shell was perfect, with sharp edges, and had apparently got fixed in the mucous folds of the trachea. The shell had been in the trachea just a week. After coughing up the shell all symptoms disappeared, and the patient left the hospital on the following day quite well.

LAMBETH INFIRMARY.

IMPACTION OF FOREIGN BODY IN PHARYNX OF A CHILD; REMOVAL; RECOVERY.

(Under the care of Dr. HAMERTON.)

G. C——, aged one month, who was under treatment for congenital syphilis, was suddenly seized at about 2.15 A.M. on the morning of July 1st, 1879, with a violent attack of coughing. The night nurse, on taking the child up, noticed that the feeding-bottle which it had been sucking was without the teat and ivory or bone ring which usually surrounded it. She at once sent for Dr. Hamerton, saying the child was dying. He found the child livid and gasping for breath. On introducing his finger into the pharynx, he could feel the thickened ring of india-rubber which joins on to the wooden connecting-piece. He endeavoured to hook it up with his finger-nail, but it was too firmly fixed. He therefore caught hold of it with a long pair of forceps, but they slipped each time. The child's breathing was, however, freer each time traction was made upon the foreign body. It was then seized with a pair of vulsellum forceps, but they tore through the india-rubber. As the child showed symptoms of imminent suffocation, tracheotomy was about to be performed, when the child gave a slight gasp. One more attempt was made to remove the obstruction, and this time with success. The child then gave some deep gasps, and by means of artificial respiration and galvanism it slowly recovered. At 3.40 A.M. it was quite well and crying lustily. The cause of the great obstruction to respiration was the flat bony plate or ring of the teat being sucked down tightly over the chink of glottis during inspiration and swallowing. In attempting to remove the body, the india-rubber part was almost entirely drawn through the plate.

This case suggests the necessity for some improvements in the manufacture of these bottles, whereby the tendency to this accident may be avoided.

GLASGOW EYE INFIRMARY.

CASE OF CONICAL CORNEA; TREPHINING; VISION IMPROVED.

(Under the care of Mr. J. CRAWFORD RENTON).

J. C——, aged twenty-eight, female, complained of dimness of vision of two years' duration, the dimness being worst in left eye. She saw No. 20 Jaeger with the left eye, and No. 2 with right. The left cornea was distinctly conical; the right was only slightly so. On Jan. 25th, 1878, she was ordered eserine in solution and arsenical solution internally.

On March 8th vision in the left was reduced to counting fingers. Under chloroform the cornea was trephined by the medium-sized instrument recommended by Mr. Bowman. The circular portion of cornea was removed from apex of cone. Slight adhesion of iris to corneal wound took place, and on the 30th there was considerable sclerotic congestion, with pain on pressure, in the ciliary region. The eserine was continued, and the patient went home.

On July 5th the pain had subsided, but there was still congestion, and undue sensitiveness to light. The iris being adherent at the upper and lower aspects to the corneal wound, Mr. Renton, with Dr. Reid's approval, divided, with De Wecker's scissors, the lower adhesion; in so doing the lens was injured, and it was accordingly removed.

On Aug. 2nd, after a sharp attack of cyclitis, the eye improved, and the patient was dismissed.

On Oct. 16th the upper adhesion of iris was divided, and on the 25th the eye was quiet, and looked better in every respect than it had hitherto. The iris was entirely free from the wound, and the patient returned to the hospital on March 22nd, 1879, when an iridectomy to the lower aspect of the cornea was performed, with the result of so improving vision that, aided by a concave lens, she saw No. 8 Jaeger.

On May 1st the vision continued as good vision as at last note.

On Feb. 20th, 1880, vision was again noted and found to be as good as a year ago. The conical condition of the right cornea had not increased.

EUROPEAN GENERAL HOSPITAL, BOMBAY.

OVARIOTOMY; RECOVERY.

(Under the care of Surgeon-Major J. PINKERTON.)

M. R——, aged twenty-seven, a prostitute, resident in Bombay two years, born in Odessa in Russia, was admitted on July 10th, 1879, complaining of pain in the hypogastric region. There was a slight menstrual discharge, which she thought was brought on by a blow. She never was pregnant. The menses had often been deficient lately. The abdomen was prominent and had the appearance of pregnancy. The woman frequently vomited, and had nausea in the mornings. The discharge ceased in three days, and she left the hospital, but returned again on Aug. 6th, complaining of pain in the hypogastric region and in both temples.

On admission she was a fine healthy-looking woman. The tumour, even and quite movable, extended from the pubes to a little above the umbilicus, and occupied the median line—not more to one side than the other, but, if anything, more attached to the right iliac fossa than the left. The sound entered the uterus two inches and a half with a little difficulty, owing to the os tincæ being small; the uterus moved with the tumour, and it fluctuated. For some days after the introduction of the sound there was a slight discharge of blood. The presence of an ovarian tumour adhering to the uterus was diagnosed.

As the tumour was still small and caused little inconvenience, the patient was advised to wait; but she insisted on Dr. Pinkerton operating before he left Bombay for Europe on three months' privilege leave. He consented to operate after consulting with his colleague, Dr. Hatch.

The bowels having been opened on the 17th August, by a seidlitz powder, the rectum was cleared out by an enema at 5.30 next morning and the operation begun at 7.30. Before making the incision the abdomen was washed with a lotion of carbolic acid, and the patient brought under the influence of chloroform. During the operation the antiseptic spray was kept up. The incision through the skin was about 5½ inches long in the median line, and through the peritoneum about 4½ inches. There was a good deal of subcutaneous fat. The tumour was globular, free on all sides except below, where it was closely adherent to the fundus of the uterus and right broad ligament. It was a monocyst, and contained about thirty-four ounces of reddish-brown fluid. After emptying the cyst, it was pulled out as far as possible by Dr. Temperley, and held so while Dr. Pinkerton applied the clamp and fixed it at the lower angle of the incision. Dr. Arnott, on examining the adhesions, agreed with Dr. Pinkerton that it would be too dangerous to interfere with them. There was a little fluid in the pelvis, which was very gently sponged out, but no attempt was made to sponge out every drop of it; indeed, the sponge was very little used. No vessels required to be tied, but Dr. Arnott twisted several during the operation. The external wound was brought together by eight sutures, four deep and four shallow—the deep were silver and went through all the tissues of the wall of the abdomen except the peritoneum, the four shallow sutures only went through the skin and were placed between the deep ones; two were of catgut and two of silk; the latter were placed near the clamp, where there was a considerable strain. A whipcord ligature was applied just above the clamp, and the stump transfixed by two long needles, to guard against slipping. The cyst was cut off about an inch above the clamp, and dressed with lint soaked in carbolic acid lotion, covered with oiled-silk, carded-oakum, and a broad bandage over all.

Immediately after the operation a suppository of two grains of opium was administered, and as the pulse was small an ounce of brandy was ordered, but she did not take it all. At noon fifteen minims of tincture of opium were given. During the day she occasionally retched, and about 5 P.M. vomited once. In the evening the pulse was still somewhat small, but she felt comfortable except when retching, and then she had a dragging pain in right iliac fossa.

On the 19th she had had no vomiting, but occasional retching during the night, anorexia, temperature normal, less pain. Vomited once during the day, but had hardly any retching; by evening the pain was referred to epigastrium and wound. Pulse 82; urine drawn off. Slept occasionally during the day. Ordered a draught of morphia at bedtime. The diet to consist of chicken soup, milk, beef-tea, and ice. Temperature 99° F. at 8 P.M.

Aug. 20th.—Slept fairly well during the night, but vomited five times after taking milk, which she disliked. Tongue thinly coated, whitish. The woman looked more cheerful and said she felt better. During the night she was troubled with griping pains and flatulence. The dressing was removed, and the wound above clamp had united by first intention, without a drop of pus, the stump softening. A dressing of carbolised oil was applied in the same manner as the first dressing. A morphia draught to be taken at 10 P.M.

21st.—Slept well; took food better; no nausea or vomiting. About five A.M. she had a feeling of chilliness, and temperature was 100·4°, and pulse 102, but not full. To have three ounces of port wine daily. Temperature rose to 101·6° at noon, but was normal at 8 P.M.

22nd.—Temperature at 6 A.M. 100·6°. The dressing was removed; no pus; wound looked well. Again dressed as before, and ordered one grain of sulphate of quinia, eight grains of salicine in mucilage of acacia every three or four hours until temperature should fall. A sleeping draught at bedtime.

Dr. Pinkerton having left for England on the 22nd, the case passed under the care of Dr. Hatch, the second surgeon of the European General Hospital.

23rd.—Slept well. There was no vomiting; temperature 98·6° to 99·8°. A bloody discharge escaped from vagina. There was some pain of a twisting or screwing kind. A soap-and-water enema moved bowels twice. Evening temperature 98°.

On the 24th, the sutures and clamp were removed. The wound above clamp was healed, but an opening existed below at right side of stump, but there was no discharge from it. Discharge from vagina bright coloured blood, but less in quantity.

Up to 30th the record may be expressed by the words "doing well;" on that day she had a dose of castor oil, and a portion of the stump was removed. In the evening it was noted she was restless and had some pain, caused by one of the needles, which was removed. She was restless till midnight. On the 31st the second needle and whipcord ligature came away from the pedicle, which was black and softening. There was a considerable gap or hollow where the pedicle was retracted, and where the edges of the incision were kept apart by the stump. Gradually this part of the wound healed by granulation, and patient made a perfect recovery without a bad symptom. She was discharged on the 21st October, and proceeded to Cairo, in Egypt, to join her aunt, having given up her immoral life.

Remarks.—It is believed that ovariotomy had never been performed in Bombay on a European, though ovarian tumour is by no means rare—indeed, several cases have come under observation in the last three years at this hospital, but no one was bold enough to be the first to submit to operation. The patients' question was, "Has any other European ever been operated on for ovarian tumour?" and receiving a reply in the negative, there was always a distinct refusal to submit to ovariotomy. Under such circumstances it was most fortunate that this patient was young, strong, and otherwise healthy.

Before operating, the minutest care in regard to cleanliness, ventilation, &c., was taken; the operating room and the small room in which the patient was to be placed were thoroughly disinfected by the carbolic steam apparatus and by charcoal fires; all the instruments to be used were placed in a solution of carbolic acid and water, and, as

far as possible, Lister's antiseptic method was adopted before, during, and after the operation. In short, everything was done that could be thought of to insure a successful result. One successful case might lead to others, but one failure might deter other sufferers for an indefinite time. It was remarked that the genius and eloquence of a Nélaton were required to overcome the aversion of French surgeons to the operation of ovariotomy after the unsuccessful cases had occurred on its first introduction into France; here it was required to overcome the aversion of the patients, and a success was the only way to obtain that object. On the part of surgeons in Bombay there was no aversion, as they have frequently operated on native women, and with very fair success. Dr. Gollay, a native graduate, has operated several times successfully on natives of Western India, and a surgeon of the Bombay medical service recently performed the operation on a native of Bombay; but these cases had not given much confidence to European women.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Congenital Malformation of Spinal Column, Bony Thorax, and Left Scapular Arch.—Compound Fracture of Femur twenty years after Excision of the Knee.

THE ordinary meeting of this Society was held on the 27th ult.; J. E. Erichsen, Esq., F.R.S., President, in the chair. Two papers were read, the first being a most elaborate and complete contribution to teratology by Messrs. Willett and Walsham, consisting of an account of the dissection of a case of extreme skeletal deformity. The paper raised several questions bearing on morphology. The second paper contained an account of a case where compound fracture of the femur had occurred twenty years after excision of the knee. Bony union had taken place at the seat of excision, and the line of fracture passed transversely one inch above this spot. The paper was by Mr. Gant.

The following is an abstract of the paper entitled "An account of the Dissection of the parts removed after death from the body of a Woman the subject of Congenital Malformation of the Spinal Column, Bony Thorax, and Left Scapular Arch, with remarks on the probable nature of the Defects in Development producing the Deformities;" by ALFRED WILLETT, F.R.C.S., and WM. JOHNSON WALSHAM, F.R.C.S. The subjoined particulars are given of the woman from whom the specimen of deformed thorax was taken:—1. The curvature of the spine had existed since birth. 2. She was a woman of average height, and until uncovered did not present any noticeable deformity. 3. She had given birth to a healthy child. 4. Her mother had a curvature of the spine. 5. When undergoing physical examination of the chest, an immobility of the scapula had attracted attention, and on this account was referred to Mr. Willett. 6. The immobility of the scapula was found to be due to its union through the medium of a broad bridge of bone with the lower cervical vertebræ. 7. Extremely wide intercostal spaces were noticed, the impulse of the heart's apex being widely diffused and abnormally distinct, as if transmitted through attenuated structures. 8. She was the subject of mitral disease, and died of cardiac dropsy in her thirty-first year. The portion of the spinal column preserved deviates from the natural condition (*a*) in that not only has it lost the posterior convexity, but it has if anything a slight anterior curve; and (*b*) there is a sharp lateral curve with the convexity to the left in the upper dorsal region corresponding to the absence of the right half of the third dorsal vertebra; (*c*) there is a longer and slighter compensatory curve in the lower dorsal region; (*d*) four and a half of the dorsal vertebræ are missing. The distortion of the thorax corresponds generally to the altered line of the spine. There are five ribs missing on the right and four on the left side of the chest. The intercostal spaces are abnormally wide. The sternum lies obliquely across the middle line, pointing in its long axis forwards and from right to left; its upper end is only three-quarters of an inch from the spine, its lower end three inches, instead of two and nine respectively. The cavity of the thorax is diminished in all its diameters, especially in the antero-posterior in the middle line; whilst this measurement is markedly less on the right side than on the left. The abnormal shape of the thorax in transverse section is well seen in the diagrams made by the aid of Dr. Gee's cyrtometer. The left clavicle deviates notably from the normal; its general direction from the sternum is upwards, forwards, and outwards. It has also a single posterior curve throughout its entire length. The left scapula presents a most remarkable deformity. There is a broad bridge of bone extending from the middle third of the posterior border of this bone, backwards and upwards, to the lamina and spinous process of the sixth cervical vertebra. The transverse axis of the scapula is elongated, whilst the vertical is shortened, and the bone appears rotated forwards, so that the glenoid cavity looks nearly directly forwards, whilst the plane of it is nearly an inch in front of the left sterno-clavicular articulation. The upper border and spine, instead of being directed nearly horizontally outwards from the base, slope downwards and forwards as well as outwards. The absence of the right half of what appears to be the third dorsal vertebra is the cause of the curvature of the spine. The absence of half a vertebra has generally been ascribed to defects in the process of ossification. The authors think the absence is due to changes occurring at an earlier period of development—probably at the time of the primary segmentation of the mesoblastic elements into the protovertebræ. The bridge-like portion of bone connecting the spine with the scapula is the chief feature of interest in this specimen. The authors suggest several theories to account for its presence. They classify them under three heads according as they are based upon one or other of the following hypotheses—1st. That the bone was formed in connexion with the vertebræ and afterwards became anchylosed to the scapula. 2nd. That it was originally a scapular element, and secondarily became fused with the spine. 3rd. That it was formed independently both of the spine and the scapula. On the first hypothesis the bone may be—(*a*) An outgrowth of the spinous process or of its epiphysis. (*b*) An over-development of one of the lateral backward projecting processes, called hyperapophyses, developed near the extremity of the spinous process. On the second hypothesis it may be—(*c*) An overgrowth of the epiphysis, which exists at the posterior border of the scapula; in other words, a supra-scapular bone—the scapular arch, consequently an example of a reversion to a lower type—viz., that of the skate or the frog tribe. On the third hypothesis it may be (*d*) an ossification of one of the inter-muscular planes of connective tissue stretching between the spine and the scapula. (*e*) A rudimentary scapula, explainable on the theory that the embryo was originally cleft, and that by atrophy and by fusion with the other half one half had disappeared, with the exception of the scapula, which remains as the bridge of bone. The authors at some length discuss the arguments for and against these various theories; that which supposes the bone a supra-scapula they consider the most probable.—The PRESIDENT invited the attention of those interested in teratology to this account of a remarkable and unique case of malformation, most abundantly illustrated by the authors.—Dr. E. GRESWELL said that the specimen was highly interesting from its bearing upon the early development of the vertebral column and ribs, especially of the protovertebræ. It was known that double centra occurred in the cranial vertebræ; and Professor Humphry had pointed out facts in favour of the spinal centra being likewise developed from the centres. This view was perhaps borne out by the paper that had been read. It might be expected that the fusion of these two centra should take place at an earlier period among the higher than the lower vertebrates. The additional element to the scapula was probably a supra-scapula, and possibly a supra-clavicula; and the view taken, that this was an instance of "reversion," was probably correct. In Sorex, in Insectivora, such reversion obtained in the presence of the distal end of the coracoid, which only elsewhere existed in mammalia in the Monotremata. The gap filled by "reversion" in that instance was greater than that in the case related.—Mr. WILLETT desired to express his sense of the manner in which the details of the paper had been mainly worked out by Mr. Walsham.

A paper was read on "Compound Fracture of the Femur,

twenty years after Excision of the Knee-joint, for disease, the line of fracture being transversely one inch above the bony union," by FREDERICK J. GANT, F.R.C.S., of which the following is an abstract:—In considering excision of the knee-joint, for disease, as an operation having in view the preservation of a useful limb, that result could only be attained by complete synostosis or bony union of the femur and tibia; and as a similar result may be produced by osseous anchylosis, from the natural cure of the disease, this is the true ground for comparison in estimating the result of excision. The comparative merits of bony union and ossific anchylosis must have regard to the functional utility of the limb, for the twofold purpose of support and progression; taking into account also the relative duration of the processes of cure, and the risk to life. The author adverts to the process of natural cure in joint-disease from all these points of consideration. On the other hand, the practical importance is urged of entirely dissociating joint-excision from amputation of a limb, as alternative procedures; and the conditions are specified under which either operation becomes justifiable in the career of joint-disease, having reference principally to the constitutional health of the patient, requisite to undergo the different periods of recovery after operation. The history of the case to which the paper relates is narrated; its chief features being that a woman, aged thirty-three, admitted into the Royal Free Hospital, September 12th, 1859, had chronic synovitis of the right knee-joint, arising from injury; the duration of the disease was six years; ulceration of the articular cartilages had ensued with caries of the adjoining portions of bone, and malposition of the leg backwards towards the buttock, thus rendering the limb functionally useless. The constitutional condition, however, was not that of advanced hectic, but one of nervous exhaustion. Excision of the joint resulted in firm osseous union, in the unusually short period of two months. A thoroughly useful limb continued for twenty years, during which period the woman often walked several miles a day, without any artificial help. She then fell downstairs, and snapped the femur, the bone breaking one inch above the union, and rendering the integument open to the extent of some inches across. From the shock of this severe compound fracture, and the collapse due to rather copious hæmorrhage, although without injury to the popliteal artery, the patient never rallied after her admission to the hospital on this occasion. Section shows complete synostosis of the femur and tibia, and that the bones are fused together, the line of junction being imperceptible. It resisted the extreme violence, aided by the leverage of the leg, which broke the femur across just above the union. Whether anchylosis would have withstood the same amount of force, may well be doubted. Thus the cure resulting from surgical interference in joint disease may prove more effectual than that produced by nature, and the limb be rendered far more safely serviceable.—Mr. HOLMES said the two questions raised by the paper were, first, as to the comparison between excision and amputation, and, secondly, as to the definite results of excision of the knee. Mr. Gant seemed to have abandoned the old line of argument in favour of excision, that adopted by Sir W. Fergusson—viz., as an alternative for amputation—and to have made a comparison between excision and natural cure, so that he would reserve the operation for cases in which natural cure was not practicable. It would seem as if the practice of excision of the knee had fallen into a desuetude, which it does not deserve; it was far less practised now than it used to be ten or fifteen years ago. It was forgotten that the operation was originated as a substitute for amputation, especially in early life. He lately saw a man whose knee-joint, when a child, he (Mr. Holmes) had excised twenty years ago. Although there was, of course, much shortening, the limb was quite firm, and the man had walked thirty miles a day on it. In Mr. Gant's case the excision was performed as a substitute for amputation; for, had the joint been left alone, there would have been great exhaustion, &c., following prolonged suppuration, and amputation might subsequently have been called for.—Mr. GANT, in reply, agreed that the original view of Fergusson was to make excision of the knee an alternative for amputation, and he himself (Mr. Gant) used to hold this view. But he had changed his opinion, and now tried to consider the probable issue of a case, if left to itself, before resorting to excision, which he would not delay too long, lest amputation became the only procedure possible.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Dupuytren's Contraction of Fingers.—Liver Abscess and Antiseptic Precautions.

AT the meeting on April 19th, F. J. Gant, Esq., President, in the chair,—

Mr. WILLIAM ADAMS exhibited a number of casts of Contracted Fingers. Many were due to contraction of the palmar fascia and its digital prolongations. Such were cured by multiple subcutaneous divisions of the fascia and immediate extension. Mr. Adams regarded it as usually commencing in chronic gouty inflammation and thickening of the fascia. These cases were compared with the cast of a case of finger contraction, following lacerated wound of the wrist, and depending on contraction of the tendons. He also showed a cast of a remarkable case in which the little finger was severely contracted by a web of skin extending from the point of the finger to its base.—The PRESIDENT referred to the case of a gentleman, aged eighty, who had suffered from contraction in both hands. Mr. Gant had remedied this in the right hand by tenotomy and extension.—Mr. SPENCER WATSON asked for evidence of a gouty origin of the disease, and alluded to Mr. Hutchinson's observations of the concurrence of thickening of the sclerotic (and glaucoma) with Dupuytren's contraction.—Dr. FOTHERGILL had frequently noted these contractions in gouty subjects, and almost invariably found them symmetrical.—Mr. OWEN alluded to a case of this disease in a gentleman, aged thirty, in which the middle finger of the right hand was contracted, and where he had operated by dividing the fascial band, applying a splint and gradual extension.—Dr. GILBART SMITH, referring to Mr. Adams' remark as to the rare occurrence of the disease amongst women, said he had lately seen a lady with both hands affected by these contractions. He also knew of an instance where three brothers, all of them gouty, suffered in this manner.—Mr. ADAMS replied.

Sir J. FAYRER read a paper on Liver Abscess and Antiseptic Paracentesis (THE LANCET, pp. 633, 673, 707). In the discussion which followed, Professor LISTER expressed his personal gratification at the decided testimony borne by the author to the value of strict antiseptic management of hepatic abscess. The most striking feature in the first case was the profuse but temporary hæmorrhage that followed the incision into the liver substance. Professor Lister said it was this disease that first led him to think of the steam spray for antiseptic treatment; an Indian surgeon of large experience having pointed out the difficulty of preserving the caoutchouc bellows for producing the spray in the climate of India.—Dr. J. K. FOWLER referred to a case of hepatic abscess under Dr. Bradbury's care at Addenbrooke's Hospital, believed to have been due to the presence of round worms in the common bile duct. Recovery followed immediately upon aspiration. He strongly urged the use of large trocars in exploration.—Dr. NORMAN CHEVERS said the objections to small trocars in evacuating liver abscess had been confirmed by the rather large experience of the aspirator. He thought the syringe shown by Sir J. Fayrer admirably adapted for the purpose. Dr. Chevers alluded to the difficulties in diagnosis of these abscesses, especially when complicated with right basic pneumonia, or where there is a large central abscess, not pointing in any direction.—Mr. CULLIMORE, who had himself suffered from liver abscess following dysentery five years ago, said that ipecacuanha was not well borne when hepatic disease was present. The persistently high temperature afforded a means of diagnosis between abscess and simple congestion of the liver. The greater prevalence of the disease in Madras was, in some measure at least, due to the number of soldiers invalided from Burmah and other parts.—Dr. MAIR confirmed the author's statement as to the comparatively greater frequency of hepatic disease in Madras than in the other Presidencies of Bengal and Bombay. He attributed this to the prolonged high temperature, to the prevalence of malaria, and to the causes mentioned by the last speaker. Referring to the insidious progress of hepatic abscess, Dr. Mair pointed out the importance of prophylactic measures when the liver is in the condition of acute, subacute, or chronic congestion, and suggested for the latter a combination of chloride of ammonium with nitro-muriatic acid and ipecacuanha, together with the

local application of strong iodine paint.—Sir J. FAYRER, in reply, said he would not recommend the use of small trocars in tapping these abscesses, but preferred a large cannula where the abscess was deeply seated. When it was nearer the surface he preferred a free incision, with antiseptic precautions, of course.

OBSTETRICAL SOCIETY OF LONDON.

ON April 7th—Dr. W. S. Playfair, President, in the chair—Dr. BANTOCK showed a large Uterine Polypus, weighing one pound three ounces in its fresh state, removed from a woman, aged fifty-one, by the écraseur. Symptoms had existed six years, but the tumour had only been discovered three weeks before, on the occurrence of retention of urine.

Dr. GALABIN showed twelve large Calculi and about fifty small ones, which he had removed by vaginal lithotomy from the bladder of a woman, aged sixty-one, with the assistance of Mr. W. F. R. Lane. They were of lithic acid, and weighed eight and three-quarter ounces, the largest measuring 1½ by 1¼ in. by 1 inch. Both uterus and bladder were prolapsed completely outside the body, and had not been returned for ten years. Symptoms referable to the bladder had only existed six months. The patient was crippled, and the thighs almost anchylosed, from rheumatoid arthritis. The wound was closed at once by silkworm-gut sutures, the procident mass returned, and kept up by an elastic ring. At the end of ten days union was perfect. The stones had evidently been prevented from escaping as usual, while small, owing to the position of the bladder, with its orifice uppermost.—Dr. ROPER mentioned a case in which he had removed calculi by dilating the urethra, and asked why Dr. Galabin had chosen lithotomy?—Dr. AVELING thought that lithotomy was the preferable operation in such a case, and said that the risk of hæmorrhage might be avoided if the sutures were carried through the mucous lining of the bladder. He had seen two cases in which the urethra had been completely destroyed by dragging calculi through it.—Dr. R. BARNES said that dilatation of the urethra or lithotrity was most suitable for small or moderate-sized calculi, lithotomy for a case like the present.—Mr. DORAN had removed a calculus half an inch in its narrowest diameter from the bladder of a girl, aged nine, by dilating the urethra. But when calculi were numerous he considered lithotomy preferable.—Dr. ROGERS believed that Dr. Galabin had taken the best and wisest course. He had met with a case in which a large calculus was encrusted on a hairpin. This was crushed and brought away through the urethra without much mischief following.—Dr. GALABIN had chosen lithotomy on account of the number and size of the stones, and the great amount of inflammation present. His experience was that, if the urethra were dilated much beyond the size of the index finger, more or less incontinence of urine was apt to remain permanently. No disturbance had followed the operation, but the patient was relieved immediately from her suffering.

Dr. ROPER showed an Ovum expelled entire, together with a large clot. This occurred seventy-four days after marriage, but the ovum appeared to be older than this. Twenty-six days before marriage the patient had had phlegmasia dolens, and he thought that the clot might have been the cause of the death of the ovum and of the phlebitis at the same time.

Dr. GORDON showed, for Dr. Murphy of Sunderland, a Double Monster, consisting of two female children united by the front of thorax and upper part of abdomen. The first head was delivered by forceps, body of first child extracted by hooking fingers over breech, the feet and body of second, and finally second head. Both were born alive and breathed for a few minutes.

Dr. GORDON related a case of Removal of Fibrous Outgrowth from the Fundus Uteri, with recovery. The patient, aged thirty, was under the care of Mr. Alfred Cooper. She suffered from great difficulty of micturition and defecation, and such depression of spirits that life had become a burden. For the last five years the menstrual flow had become diminished in quantity and clotted, still lasting an entire week. A hard nodular tumour was found, reaching almost as high as the umbilicus, movable separately from the uterus. The anterior wall of the uterus appeared also to be in a fibroid condition. The probe extended 2¾ in. The patient being very anxious for an operation, the author sanctioned it, having warned her that considerable risk would be incurred thereby, and that cure of the symptoms was not certain. Mr. Spencer Wells concurred in this opinion, and performed the operation on December 10th, under carbolic spray. The pedicle of the fibroid tumour, attached to the right posterior angle of the uterus, was fixed by a temporary clamp. On drawing up the clamp to transfix the pedicle the strain was so great that the pedicle tore away from the uterus, which receded into the abdomen. So little hæmorrhage, however, occurred that no means to arrest it were found necessary. The patient recovered without adverse symptoms. All her troubles and low spirits had disappeared since the operation.

Mr. KNOWSLEY THORNTON raised the question of the Removal of Uterine Fibroids by Laparotomy. He not only regarded the removal of uterine fibroids by abdominal section as justifiable in certain cases, but believed that the future of these operations would be in no way second to that of ovariotomy. The objections to operating by laparotomy for fibroids were—(1) less fatality of fibroids when left alone, as compared with ovarian tumours; (2) the greater frequency of their relief or cure by medical, expectant, or milder surgical treatment; (3) the greater danger of the operations for their removal as compared with ovariotomy. He pointed out how often dangerous operations were undertaken for the relief of deformity, and that operations of convenience were now much more safe and justifiable, thanks to Professor Lister's method. The following proposition was advanced for discussion:—Is it justifiable to make an exploratory operation with perfect antiseptic precautions in any case of fibroid tumour of the uterus, which has resisted medical treatment, and which is either endangering life or preventing the subject of it from fulfilling the ordinary duties of her sex and position? The great difficulty lies in the present uncertainty of the diagnosis between the varieties of uterine fibroids. Complete records of two cases were then given, the first a complete hysterectomy, with removal of both ovaries; the second, removal of sessile fibroids and one ovary without opening the uterine cavity. Both patients recovered without fever and without any untoward symptom. Three classes of cases were defined, each having a different amount of difficulty and risk. The author thought that th term hysterotomy should be given up, and that of hysterectomy adopted, but limited to the complete cases, in which the whole of the supra-vaginal part of the uterus was removed.—Dr. BANTOCK related two cases in which he had removed fibroid tumours. In the first a small tumour weighing two pounds was removed with a part of the uterus. The pedicle formed by the uterine body was ligatured and dropped. Death occurred from septicæmia, due to slight bleeding from the stump, with the establishment of an open canal through the cervix. In the second, an external fibroid weighing twelve pounds was removed, and the pedicle kept external. The patient did well.—Mr. DORAN said that in the fatal case mentioned by Dr. Bantock he had found a deep circular ulcer in the cervical canal corresponding to the ligature. He had examined also a fatal case under Mr. Thornton's care, in which the pedicle of a large fibroid outgrowth had been secured by the clamp. A slough had extended from the stump to the uterus.—The PRESIDENT believed that the operation had a great future before it, but his experience would not induce him to agree with the statement in Dr. Godson's paper, that it was not more dangerous than ovariotomy. Moreover, a patient with ovarian tumour rarely lived if left to herself; a person with fibroid rarely died.—Dr. MATTHEWS DUNCAN thought it demonstrated that the operation had a place in legitimate surgery. With increased knowledge of the natural history of fibroids he believed that the use of the operation would be extended beyond what many timid men at present imagined. Such tumours were liable to dangerous diseases and degenerations, liable to induce peritonitis, liable even to induce cancer, especially of the peritoneum. The paramount danger arose from the bleeding which accompanied them and produced a fatal result, he believed, more frequently than was generally supposed.—Dr. HEYWOOD SMITH criticised Mr. Thornton's use of the word laparotomy to designate abdominal section in the median line, since the word λαπαρον meant the flank. If a word were wanted to supersede gastrotomy, cœliotomy, from κοιλια, might do. He thought that in dealing with the pedicle a method might be devised of closing

the cervical canal with sutures.—Dr. FANCOURT BARNES remarked that the word λαγαρη signified the soft part of the body between the ribs and the hips.—Dr. GRAILY HEWITT related a case in which a fibroid tumour, thought at the time to be ovarian, caused so much ascites and peritoneal irritation as to threaten speedy death. The tumour was successfully removed. — Dr. CHAMPNEYS said that the liability of fibroid tumours to tear, as happened in one of the described cases, showed that there was some risk in the legitimate proceeding of lifting impacted fibroids out of the pelvis.—Mr. THORNTON, in reply, deprecated the fastening of the pedicle up to the abdominal wall as a dangerous practice. He would remind the President that many ovariotomies were incomparably more difficult than the removal of a pedunculated subperitoneal fibroid. He had now operated for uterine tumours twelve times; in ten cases the operations were completed, in two they were not. Four of the former died and one of the latter. In three complete hysterectomies with removal of both ovaries he had one death. One hysterectomy with removal of one ovary, death from haemorrhage. In three removals of fibrous cystic tumours all recovered.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

AT the meeting on April 21st, W. A. N. Cattlin, F.R.C.S., President, in the chair—

Mr. CHRISTOPHER HEATH showed a patient (a woman), aged forty-four, who had been under his care for cystic disease of the lower jaw in University College Hospital in 1875 as bearing upon the case he was about to relate. Mr. Heath then narrated a "Thirty-five Years' History of a Maxillary Tumour." The patient, aged sixty-seven, when he first came under his notice in 1877, was a healthy country gentleman, who said that as long as he could remember there had been some enlargement of the right side of the lower jaw. In 1845 this enlargement increased very rapidly, and in 1847 Sir Wm. Fergusson removed a tumour of the right side, sawing through the ramus horizontally and the body of the jaw close to the right canine tooth. The tumour was apparently of a fibroid character, having a large cyst developed in it. He continued in good health for fifteen years, and then noticed the formation of a cyst in the incisor region, which had frequently been tapped by Sir Wm. Fergusson. In July, 1877, Mr. Heath found cystic disease of the left side of the body of the jaw extending to the molar region, and operated by extracting all the teeth, opening up the cysts freely, and clearing out some solid growth with the gouge. From this the patient made a good recovery, with considerable consolidation of the bone, but in the November following one cyst was found to have developed anew in the incisor region, and this was treated in a similar manner. A year later a fresh development of cysts had taken place, and the operation was repeated with a good result, so that in February, 1879, the jaw was completely consolidated, and the patient was advised to have some artificial teeth fitted. In November, 1879, the patient reappeared with a large solid tumour, involving the left side of the body of the jaw, which, noticed first in June, had grown rapidly of late, and now involved the skin for an area of a square inch. On December 2nd Mr. Heath removed the tumour by sawing through the bone immediately in front of the left masseter, and also removed a piece of infiltrated skin from the left of the median line. The wound was brought together with hare-lip pins and sutures, and only one artery (facial) was ligatured. The patient made a good recovery, took food with a spoon, and was able to talk intelligibly after the first week, although deprived now of the entire body of the jaw. The lower end of the wound being left open afforded a thorough drain for discharge. The patient returned early in February, when the skin near the wound was found to be increasingly infiltrated, and a tumour of the size of an orange was found beneath the right deltoid. He had strained the right arm in getting into a hip-bath, but was quite clear that the humerus had not been struck. The tumour was painful, but the bone was sound, the head moving with the shaft. A week later the patient was found to have a tumour in the pelvis, pressing upon the rectum, and springing from the interior of the right innominate bone. From this time he gradually lost strength, and died at the end of March. The second tumour was pronounced by Mr. Doran to be a round-celled sarcoma, and the same growth was found in the piece of skin which was removed. The earlier tumour appeared to be a fibroid or a spindle-celled sarcoma. No post-mortem examination of the internal growths could be obtained. Mr. Heath remarked upon the great interest of the case, and its important bearing on the treatment of cystic disease of the lower jaw. Hitherto cystic disease of the lower jaw had been regarded as a local ailment, and the treatment by clearing out the cysts, and crushing in their walls, had given good results. In this case more than thirty years had elapsed between the formation of the two growths, and in the interval cystic disease had been largely developed. Mr. Heath then alluded to the female patient he had previously shown, who had been under his care for the last five years, and in whom he had twice operated by breaking down the cysts with good results; but in whom there was now considerable thickening of the jaw, but no distinct tumour.—The PRESIDENT said the case just described by Mr. Heath was, he thought, an example of specific disease. There were three distinct cysts and considerable deposit of solid matter, and its malignant character was shown and proved by metastasis to the pelvis. With the exception of dentigerous cysts, the most common form of disease of the lower jaw was a single cyst which expanded the walls and produced absorption. Such growths were generally innocent.—Mr. S. CARTWRIGHT was inclined to think that cystic tumours more often had their origin in the teeth than was generally supposed, the peculiar connexion of the teeth with the jaw favouring this hypothesis. In many cases the cysts were probably congenital, and formed in connexion with the primitive sac of the tooth. —Mr. HAMILTON CARTWRIGHT said that the character of the tumour Mr. Heath had just described was evidently not of the odontomatous or dentigerous kind. He believed that such growths were of dental origin, subacute, not acute, inflammation of the root being the first origin of the evil.

Mr. NAPIER brought forward the models of an Irregularity in the Position of the Right Upper Central Incisor in a child aged six and a half years, and asked the opinion of the Fellows respecting the advisability of torsion at so early an age.

Dr. M'OSCAR showed the casts of a case of Epulis, which was virtually cured after a few weeks' treatment by electrolysis, although continued occasionally for months. The case has remained as a cure.

Reviews and Notices of Books.

Manual of the Principles and Practice of Operative Surgery. By STEPHEN SMITH, A.M., M.D., Surgeon to Bellevue and St. Vincent Hospitals, New York. London: Trübner and Co. 1880.

THERE is more in this book than its title would lead us to think, for not content with describing the operations of surgery, Dr. Smith describes briefly the anatomy of each part, and the symptoms of the diseases and injuries the various operations are intended to relieve. As all this has been done in a small octavo volume of less than 700 pages, it is of necessity that brevity should have been everywhere practised. We wish Dr. Smith had been satisfied to limit himself to a description of the details of operations and surgical manipulations. He has been unable to discuss diagnosis, and his descriptions of operations lack some of those smaller details that would make them of greater value. For a surgeon who is already a practised operator they are full enough, but for him also they are for the most part superfluous, while in many cases an inexperienced surgeon would not be able to rely solely upon these descriptions. What the surgeon who consults works on operative surgery requires is to learn exactly what operation or method of treatment the author has himself found to be best, and he wants to have given to him not merely the main outlines of the operation, but the little details and precautions which by practical experience have been shown to be of importance. A

work on operative surgery, more than all others, needs to bear the stamp of the author's individuality. For the most part the descriptions have seemed to us to be accurate, but we have met with a few statements and recommendations that have surprised us. Thus we find "inflammatory fever" spoken of as resulting "from the local production of heat through textural changes by which the temperature of the entire mass of the blood is gradually elevated." The most superficial consideration of well-known facts will at once show this statement to be entirely inaccurate, and we are sorry to see that this old error has still so much vitality. As it has not yet completely disappeared from English manuals of surgery, we must not look upon it as a peculiarity in American teaching. But the few failings in the work do not neutralize its many real and obvious excellences; it is intelligible, concise, and impartial, and, on the whole, accurate.

Notes on Physiology. By HENRY ASHBY, M.D. London: Longmans. 1880.

FEW things look more easy, but few are more difficult, to write than a good summary of physiology. So many points are obscure, so many uncertain and still under discussion, that it requires the hand of a master to pick out what is known and really practically useful from the vast mass of facts and theories which constitute the physiology of the present day. The little work before us aims at giving such an outline of the subject of which it treats as shall enable a student not only to pass an ordinary examination like that of the College of Surgeons, but shall be of some service in the practice of after years. It is important that such a work should not only be free from errors, but present the salient points in such form as shall fix them in the memory of the student. In both these respects we think Dr. Ashby has succeeded. Having been himself a lecturer on physiology, he has the experience which is requisite to give a correct statement of facts, and, on the other hand, the limits to which he has confined himself has compelled him to give the briefest expression to those facts consistent with clearness. We venture to say that a student who shall not only thoroughly know, but fully understand, this work, supplementing it with such a work as Johnston's "Chemistry of Common Life," and an elementary treatise on histology, will compass all that would be required of him by the examiners of the college, and will have acquired knowledge that would be extremely useful to him what professional path soever he chose to pursue.

Rest and Pain: A Course of Lectures on the Influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases, and the Diagnostic Value of Pain. By the late JOHN HILTON, F.R.S., F.R.C.S. Edited by W. H. A. JACOBSON, B.A., M.B., F.R.C.S., Assistant-Surgeon to Guy's Hospital. Third Edition. George Bell and Sons. 1880.

WE are very glad to see that a third edition of this work has been called for. We know of no work in the English language from which a practitioner or student will gain more help of life-long value than from this. Much of its teaching was common property when the lectures were first delivered, much is found in our text-books and embodied in the practice and teaching of all our hospitals, but none the less is it to be wished that every practitioner and every advanced student should be familiar with Hilton's classical work. It is of double value, for while the mere facts recorded and suggestions for treatment are of use, the clear way in which the close connexion between anatomical and pathological peculiarities are traced out is perhaps more valuable still; its mental training is in every way good. Those of our readers who have not dipped into this treasury have a rare treat in store for them. This edition is an almost exact reprint of the last.

OUR LIBRARY TABLE.

The Journal of Mental Science. April.—The original articles, although five in number, occupy a very small bulk in the current number of this journal—only 40 pages out of 160. Dr. R. Lawson discusses the epilepsy of Othello, showing the accurate observation which Shakspeare's description proves; Dr. Chapman compares some statistics which he has obtained from various asylums on the comparative mortality of different classes of patients; Dr. Bevan Lewis contributes an account of some experiments, to which we have already called attention, on the physiological action of alcohol; Dr. Geoghegan discusses the chemical constitution of cerebrine; Dr. Thurnam endeavours to find a connexion between the state of the pupils and the state of the mind in general paralysis, and believes that the facts warrant the opinion that there is a centre in the right hemisphere on which depends exaltation of ideas. The "Clinical Notes of Cases" are of considerable interest. The "Occasional Note" is devoted to the discussion of the question of abolition of private asylums. Of the Reviews the most important is an able notice of Calderwood's "Relation of Mind and Brain," evidently from the pen of a well-known physician who is pre-eminently qualified to deal with the subject.

Le Cerveau, sa Topographie Anatomique. Par le Dr. C. MOREL, Professeur d'Histologie à Nancy. Paris: Berger-Levrault et Baillière. 1880.—This work consists of seventeen plates, each containing a wood-cut figure. Brief letter-press descriptions are added. The figures represent a brain hardened in nitric acid and dried. The first three plates are of the outer, inner, and lower surfaces; then follow the same figures divided into lobes and lobules, then the same with the fissures and convolutions marked, and then the outer surface with Ferrier's centres indicated, and, lastly, a vertical transverse section through the hemisphere. The figures, from photographs, are very beautifully cut, and may be referred to with advantage by those familiar with cerebral anatomy, but we would caution learners against depending upon them exclusively. The brain chosen is not typical, since both the ascending parietal and ascending frontal convolution are represented as cut across by fissures. Moreover, the convolutions indicated are not quite those currently distinguished; the inferior parietal lobule is made to extend back to the longitudinal fissure, behind the parieto-occipital fissure. The greatest inaccuracy, however, is in the representation of the cortical centres, which appear as if inserted from a written description, and differ very much from the diagrams of Ferrier. In almost every case the centre marked does not occupy more than one-fifth of the area which ought to be indicated.

The Fallacies of Popular Clinical Medicine. By Professor JAMES G. WRIGHT, M.D. New York: Putnam. 1880.—This is a trenchant and wholesome attack upon a system of clinical education based on lectures merely, without securing the student a practical acquaintance with the features of disease. The author appears to us to assume rather too much that our systems of medical education are purely theoretical. This we take leave to say is not the case, and we cannot go with him in styling the system he condemns as the "popular" one. We agree with him that the only sound knowledge is that derived from personal observation and practical work, and nothing could be better than to enforce this in an introductory lecture. But in doing so it was hardly necessary to hold up to scorn a state of affairs which, at any rate in this country, can hardly be said to exist. Clinical lectures of course do not take the place of bedside study; they never will take this place, they never have been considered as substitutes for it. Still it is impossible to be blind to the fact that examination tests are often so framed as to fail to discriminate between the candidate whose knowledge has been gained from direct per-

sonal observation, and the one who has merely been filled with the knowledge afforded him by books and lectures. In drawing with so bold a hand the distinction between these two kinds of knowledge, the author has our best thanks, and one may overlook a little exaggeration in phrase and thought, having regard to the good object he has in view. The pamphlet is an introductory lecture delivered at the Long Island College Hospital, Brooklyn, N.Y., on Feb. 5th, 1880.

Healthy Life and Healthy Dwellings: a Guide to Personal and Domestic Hygiene. By GEORGE WILSON, M.A., M.D., C.M. (Edin.), Medical Officer of Health for Mid-Warwickshire Sanitary District. Fcap. 8vo, pp. 302. London: J. and A. Churchill.—This is a sound work by a very competent writer on matters in which the public have of late displayed an unwonted interest. The work will take a permanent position among the popular treatises on the subjects with which it deals.

A Manual of Scientific Terms, Pronouncing, Etymological, and Explanatory; chiefly comprising terms in Botany, Natural History, Anatomy, and Veterinary Science. Designed for the use of Junior Medical Students, &c. By Rev. JAMES STORMONTH. Small 8vo, pp. 488. Edinburgh: Maclachlan and Stewart. 1879.—In typography and handiness, this work leaves nothing to be desired. The same also may be said of the etymology and the indications for pronunciation. The "explanation" of the medical terms needs, however, some revision.

Small-pox and Vaccination, being a portion of the Twenty-third Annual Report of the Vestry of St. Mary, Newington, 1878-79. By WILLIAM TIFFIN ILIFF, M.D. Lond., Medical Officer of Health. 8vo, pp. 28. London: G. Morrish, Camberwell-road.—This is a reprint of Dr. Iliff's excellent observations on this subject in his annual report for 1878-79. We had occasion to notice these observations at the time of their publication, and we are glad to have them now in a separate form. We commend the pamphlet to all who take an interest in the subject, and especially to those who have suffered themselves to be disturbed by recent discussions concerning it.

Indian Notes. By F. R. HOGG, M.D., Surgeon-Major, Author of "Health and Ailments of European Families in India." Small 8vo, pp. 240. London: J. and A. Churchill.—Dr. Hogg has here jotted down a series of notes, derived from his large experience, on the voyage out, travelling in India, Upper India, stations, the hills, mineral waters, and herbs and simples. He gives his notes simply as notes, and hence gets together a great amount of useful information in small compass. To a traveller new to India and the voyage out, the book is likely to prove very useful, and it has the great merit of being handy.

The Elements of Indian Hygiene. By JOHN C. LUCAS, F.R.C.S. Eng., Her Majesty's Indian Service. Small 8vo, pp. 112. London: J. and A. Churchill. 1880.—Mr. Lucas has endeavoured to compress, not unsuccessfully, within the compass of 112 small octavo pages, the elementary principles of Indian hygiene. His style of writing is not always as clear as it might be, but it is not difficult to get at his meaning. The work is addressed "to those of his medical brethren and to others who have studied, investigated, and laboured to improve the sanitary surroundings of the poor in India," but it may justly claim and will probably have a larger circle of readers.

The Weather of 1879 as observed in the Neighbourhood of London, and compared in all respects with that of an average year. By EDWARD MANLEY, F.M.S. London: Bemrose and Sons.—Meteorologists will be glad to have this account of the meteorology of an exceptional year in the neighbourhood of London, from the pen of a competent observer. But why in the last column of the monthly tables are the words "above" and "below" printed, when the signs − and + are so much more easily read?

Analytical Records.

LIME-FRUIT SYRUP.
(RAYNER & CO., 17, FARRINGDON-ROAD, LONDON.)

THIS is not unfairly described on the label as "a real summer luxury." The genuine lime flavour in it cannot be mistaken. Perfectly bright, it forms an excellent summer drink, either with plain or aerated water. It is needless to say that such a drink is very wholesome. It is highly popular with children, for whom, as well as for adults, it is very well suited.

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(GEORGE WAUGH & CO., REGENT-STREET, LONDON.)

A useful and trustworthy preparation, greatly superior in point of convenience to the semi-solid mass commonly sold.

GARDY'S CAPSULES OF GABIAN OIL.
(BURGOYNE, BURBIDGES, & CO., LONDON.)

The mineral naphtha of Gabian in France has been suggested as a remedy in chronic catarrh, bronchitis, and other respiratory complaints. The beautifully made capsules in which the oil is now offered will render the trial an easy one.

BURROUGHS' BEEF AND IRON WINE.
(S. M. BURROUGHS & CO., SNOW-HILL, LONDON.)

This is a really valuable preparation, and, as far as we know, a novelty. It contains beef-extract and citrate of iron in solution in wine, and is therefore a very powerful and rapidly acting tonic. Children, as well as adults, take it easily; and as its taste is by no means unpleasant, it can hardly fail to attain great popularity.

MIXTURE OF SCOTCH WHISKIES,
(DOUGLAS & MASON, EDINBURGH.)

This whisky is a good example of the advantage of skilful blending. The sample submitted for our examination was excellent in every respect, and had the smooth taste and delicate flavour so often wanting in Scotch whisky.

PIL. CALCIUM SULPHIDE.
(W. B. WARNER & CO., PHILADELPHIA.)

This valuable and now fashionable remedy is not easy to administer agreeably. These pills contain one grain each of the sulphide, are well prepared, and can be taken easily, without any unpleasant taste. The agents are Messrs. Newbery, of Newgate-street.

AMYLINE, OR PURE UNSCENTED VIOLET POWDER, COMPOSED SIMPLY OF SPECIALLY PREPARED PURE STARCH POWDER.
(T. O. SANDELL, WEST KENSINGTON.)

Certain of the so-called violet powders in use consist, as our readers are aware, of sulphate of lime, which, according to some, is a highly dangerous article for nursery use. It is, in any case, a most undesirable one, and a pure and well-prepared starch is greatly to be preferred.

ADULTERATION IN DUBLIN.—From the report of Dr. Cameron, City analyst for the past year, we learn that 686 articles, comprising milk, butter, tea, spices, &c., were examined during that period. Of these ninety-three were found on analysis to have been adulterated, eighty-five samples of milk having been condemned. The adulterated mustard contained from 30 to 60 per cent. of wheat flour coloured with turmeric, and having in addition a little cayenne pepper; while the cocoa in two samples out of four obtained consisted almost entirely of arrowroot and sugar. Forty-four persons were convicted of selling adulterated food, and fined in sums amounting to £127 15s.

THE LANCET.

LONDON: SATURDAY, MAY 8, 1880.

IT is the glory of this country that any Government borne into power by the clearly expressed will of the electors immediately commands respect, and a disposition to put a favourable construction upon its motives and its endeavours. After a time it may lose these great advantages by bad policy, or by faulty legislation, or injudicious appointments; but at the outset of a Parliament none of these conditions exist; it is sunshine and the time to make hay. Even the enemies of such a Government so far favour it; and the Conservatives in opposition are not behind their opponents in this grace, so far at least as the kind of questions are concerned in which we are most interested. In these lights, and apart from strictly party considerations, we very favourably regard the change of Government. Whether it was his misfortune or his fault, no Premier ever so signally disappointed the expectation of those of us who have deep vision into the social and sanitary conditions of the people as did Lord BEACONSFIELD. For he himself raised the expectation which he never satisfied. *Sanitas sanitatum, omnia sanitas*, were the words of wonderful wisdom with which he began the campaign. Had he steadily kept them in mind, and embodied them in healthy and vigorous measures, we should not have seen what we have seen within the last few weeks. The health legislation of the late Parliament has been of the feeblest kind. Great epidemics have stalked over the land unchecked; and no effective attempts have been made to curtail the liberty of people carrying plagues about with them, or to quicken the energy of sanitary authorities in using the powers of curtailment they already possess. Foul air, bad water, and injurious drink, and plenty of it, are still in the ascendant, with all their retinue of disease—diarrhœa, consumption, typhoid, glandular degeneration, &c.,—and their secondary following of misery and pauperism. We are quite ready to believe that Lord BEACONSFIELD was drawn away from his good purposes by circumstances which were too much for him. But it will be a terrible misfortune if his successors do not profit by his experience, and do not keep in view, as a primary object of legislation, the making of strong laws that shall diminish the number of those who

> "feel death
> And all the sad variety of pain."

There is everything, so far, in the *personnel* of the Ministry to make us hope for this elevation of *sanitas* into the region of first objects. It contains men who in humbler spheres have done good service in this direction. It is only in humbler spheres that the qualities for creating such legislation can be gained. It would have been easy for the new powers that be to have given great discouragement to the friends of public health. Negatively as well as positively there is much reason to be thankful to Mr. GLADSTONE for the construction of the Ministry generally and of the Cabinet in particular. The appointment of Mr. DODSON to the Presidency of the Local Government Board, with a seat in the Cabinet, is an act upon which we have already commented with the greatest satisfaction. Mr. DODSON's Parliamentary experience and personal character eminently fit him for the important post assigned to him. It is eminently worthy of Mr. GLADSTONE to have taken the initiative in giving the Local Government Department its proper place. He is, *par excellence*, the statesman who believes in government, both local and central. To give to the Local Government Department a voice in the Cabinet is the very best way to impart dignity to local government and efficiency to central legislation. When it is remembered that the whole of our Public Health Acts are administered by the Local Government Board in connexion with the local sanitary authorities, it will be perceived that this novelty in the Cabinet is one which affords ground for new hope and encouragement to all who are concerned either officially or philanthropically in promoting public health. It is, of course, monstrous that such a minister should have hitherto been shut out of the Cabinet; but it marks a change of the greatest significance that he should now be admitted.

It would be invidious to signalise other individual ministers and to say what may be expected of them from a medical point of view. There are three great directions in which it is in the power of legislation to promote public health. It can deter and discourage drunkenness, it can recognise and apply means for preventing the spread of disease, and it can perfect or greatly improve the machinery by which medical education is given and tested. Under this last head, Parliament can do much by amending the Medical Acts, and it is gratifying to us, in this connexion, to note that the new Vice-President of the Council was in 1871 identified with THE LANCET Bill, which proposed to deal effectively not only with the constitution of the examining bodies, but with that of the General Medical Council. It is not likely that the investigation into the amendments necessary in the Medical Act will suffer in thoroughness under the presidency of Mr. MUNDELLA. The work lies ready to his hand, and can easily be finished in the remaining weeks of the session.

The amendment and development of our Health Acts may safely be left to Mr. DODSON after consultation with the able medical officers of the Board. There is certainly much to be done, and it will take the whole interval between the present and the next session to determine the best way of giving the public health side of the Local Government Board greater efficiency and importance.

The discouragement of drunkenness is an object on which all classes of the community are set, including the very classes who are most demoralised by this vice. It may be safely and strongly asserted that this is one of the questions raised at the election, and upon which it turned. Mr. GLADSTONE is sure to take a statesmanlike view of this question. He will not allow the fact of the opposition of "the trade" to him and his party to influence him to do any injustice to the trade. He has, we fear, a paternal affection for the grocer's licence, which, in our opinion, has done much to promote secret and undetected drinking. Nevertheless, he will not fail to see, and, we hope, to satisfy the

demand of the people for some legislation that will reduce the gross amount of drink consumed.

THE experiments on the communicability of tuberculosis by inoculation which were made some ten years ago by VILLEMIN, BURDON-SANDERSON, and WILSON FOX, left the question still unsettled. They demonstrated that guinea-pigs might be rendered tubercular by the inoculation of tubercle, but they proved also that the same effect might be produced by the inoculation of materials by which no tuberculous poison could possibly be introduced. They established the possibility of the transmission of tubercle in this way, and rendered it even probable that in the human subject caseating tissues might set up a general tuberculosis, but the results of the experiments were rather opposed to than in favour of the theory that the source of the disease was of a specific character. In this position the question has remained. Lately, however, fresh evidence in support of the view that tuberculosis may be propagated by a specific process of infection has been brought forward by Professor COHNHEIM, who has built upon that evidence a precise theory of the origin of the disease in the human subject. The theory, indeed, compared with the foundation on which it rests, is of disproportionate dimensions. The proof is so inadequate that we might be tempted to cast it aside as one of those hasty generalisations which characterise the brilliant theorist rather than the scientific investigator, were it not that pathology owes so vast a debt to the previous discoveries of COHNHEIM, that his theories, as well as his facts, deserve most careful consideration.

In conjunction with SALOMONSEN, COHNHEIM has obtained some remarkable results by making the eyeball the seat of the inoculation. The experiments were made upon rabbits. A minute fragment of tuberculous material was introduced into the anterior chamber through a linear incision in the cornea. After an incubation period of about three weeks, an eruption of minute nodules appeared upon the iris. These increased in size, and then underwent caseation. In most cases, after a period of some months, there occurred a more or less general formation of tubercles in the lungs, peritoneum, and other organs. This general tuberculisation was found to occur invariably when genuine tuberculous matter had been inoculated; so that COHNHEIM asserts that the inoculation may be employed as a test to ascertain the character of any pathological product. As he points out, such a test, if it can be relied upon, may be a very important pathological criterion, since the morphological characters of a new formation do not in all cases suffice for the determination of its nature, and often leave us in doubt whether the tissue is tubercular, or whether it is of syphilitic origin, or is merely the result of a non-specific inflammatory process. Neither, he observes, the tubercular form, nor the histological characters, neither the occurrence of giant cells, nor caseation, nor all these elements together, are absolutely characteristic. The only certain criterion is, he believes, inoculability.

It is evident that such a test needs to be established upon a wide and certain basis of fact, if it is to be employed as an absolute criterion, from the verdict of which there is no appeal. Although these experiments, taken alone, may seem to furnish such unquestionable evidence, if we take them in conjunction with the very uncertain results obtained by previous observers, we may well hesitate, and ask for confirmatory investigation before we venture to trust to them with the implicit confidence of their author. Employing these results of inoculation as a crucial test, he concludes that we must regard as tubercular many pathological products, the exact nature of which is usually regarded as doubtful—viz., caseous pneumonia, cheesy scrofulous lymphatic glands, as well as the fungating tissue of strumous joints. Other simple tissues, such as that of lupus, were found not to be inoculable. COHNHEIM does not doubt that the bearers of the contagion are parasitic organisms, although he admits that this is at present a proposition beyond certain proof.

In what is scarcely more than a sweeping hypothetical statement, although advanced as a safe generalisation, COHNHEIM applies these conclusions from experiment to explain the origin of tuberculosis in man. It is an "infection-disease," and owes its origin in all cases to the introduction into the organism of a specific virus. This enters the system most commonly through the air, and so the lungs are the first seat of the morbid process, and by extension from them the disease reaches to the pleurae and the bronchial glands. The early affection of the larynx, in some cases, is due to direct inoculation there. By the sputa the virus is conveyed into the alimentary tract, and thus the intestinal tubercle is developed. In other cases this may be the place at which the poison enters the organism, especially in children, to whom the disease is conveyed by the milk of tubercular cows, and hence arises the form of "tabes mesenterica." The scrofulous inflammations of the mouth and throat, and the caseating enlargement of the cervical glands, may own the same origin. According to WEIGERT, tubercular meningitis may in some cases be due to the migration of the virus from the upper part of the nose (!) The urogenital tuberculosis is to be ascribed to an attempted elimination, the tubercular virus, like other corpuscular elements, passing from the blood into the glomeruli of the kidney. In the cases of primary bone and joint tuberculosis which follow injuries, the poison was probably already in the blood, and is merely extravasated in preponderant quantity at the seat of the traumatic inflammation. In the cases in which there is acute and general formation of tubercles we must assume a saturation of the liquids of the body with the tubercular virus. At the opposite end of the scale are the cases of local tuberculosis, in which the change is limited to a single place. But between the two there is no fundamental difference. The limitation is either the result of the short duration of the disease, or of its tardy extension. The isolated local product is as inoculable as that which is widely diffused. The relation between the two is perhaps similar to that between a chancre and constitutional syphilis. The "phthisical constitution" is a product of the disease, not a predisposition to it. The affected individuals are already the subjects of the disease, for the most part by inheritance. The tubercular virus can pass into the reproductive elements, ovum and spermatozoon, and be present in the newly-born child, although manifesting itself, like the poison of inherited syphilis, perhaps only after many years. It is from the influence of the poison during this latent period that the "phthisical constitution" arises. The so-called "predis-

position" is really the latent stage of the disease. Between syphilis and tuberculosis we may trace the closest analogy, an analogy which is completed by the demonstration of the specific inoculability of tubercular products.

Such is the latest contribution to medical science from one of the most distinguished of living German pathologists. It cannot but excite a feeling of astonishment in those unaccustomed to late attempts to explain all the facts of almost all diseases according to one dominant theory. It is hardly worth while to mention the obvious objections to it, for many must have occurred to every reader. It is evident, for instance, that one of the first conclusions, that the lungs are affected first because the *materies morbi* enters by the air-passages, does not apply to the cases of inherited tuberculosis in which the lungs only are affected, and whatever determines the affection of the lungs in these probably determines it in all. But it must at the same time be remembered that because a theory is not entirely true, it is not, therefore, entirely false. Tuberculosis may be communicable, and yet not always or often due to the reception of a poison from without. Many clinical facts suggest that phthisis may sometimes be contracted by one individual from another. The theory of COHNHEIM, if partially true, may throw new light on such facts, while his experimental results are of such importance as to demand the attention of pathologists, and the test of renewed experiment.

MRS. PARTINGTON trundling her mop in face of the Atlantic, shriekingly exultant as the tide recedes, and incoherently despondent when it flows, is a type of sanitary legislators and legislation in the present day. Infinite care is given to provide for the removal of evils which ought never to exist, but the smallest attention is devoted to the prevention of their recurrence, or to the making such recurrence impracticable. Partington-like, we seek to stem the flowing tide of mischief by sweeping back the advancing edge, heedless of the ever-acting sources from which the flood arises. True, it may be claimed that the Legislature has not been wholly unmindful of putting a stop to the perpetuation of the sanitary evils which have been handed down from older times, and which lay so heavy a burden upon us at the present day. Has it not sought to put the construction of our houses and their appurtenances on a just sanitary basis, and to give us the power, whether as a community or as individuals, to save ourselves from sanitary negligence and its consequences? This it assuredly has done, but done in such fashion as to aggravate the condemnation which we would urge against it; for in the very doing the Legislature has confessed that it was not unaware of the fundamental defect in its general legislative proceedings in sanitary matters, and that it had sacrificed to the expediency of the moment a question which involved the vital interests of the nation, economically as well as sanitarily. The inadequacy of the existing public-health laws effectually to put a stop to the recurring growth of the conditions which are so productive of unwholesomeness in and about dwellings, stands confessed even where they may apply; but the limitations to their application are so numerous and so grave, that even such advantages as are to be gained from them are largely neutralised by the disadvantages to which they indirectly give rise. An example of these disadvantages now lies before us, given in a cutting from the columns of an unnamed journal, and which has suggested the observations here made.

One of the great manufacturing towns in the North of England has acquired powers for regulating the structure of new buildings. These powers are by no means as complete in detail as they might have been, and should have been (taking example from the previous history of the place), nevertheless they are sufficient to hold in some sort of check that class of business men to whom so much sanitary mischief is owing, and who are known as "jerry-builders." It so happens, however, that on the outskirts of the town, and outside the limits where these structural restrictions can apply, a need for new houses has arisen, and a locality has become available for them. On this unhappy district the "jerry-builders" have pounced, and there has sprung up and is rapidly growing a new town, erected in accordance with the unregulated will of the builders. Anything more deplorable in the present, and bigger with hideous promise of unwholesomeness in the future, it would be difficult to conceive. Built on ground wholly unprepared, often obviously unfit, of the flimsiest structure, and with a startling disregard of the commonest sanitary provisions, the houses are scattered pell-mell, and even before occupation, if the sanitary authority were to do their duty, should be declared unfit for habitation. But practically the sanitary authority is powerless in the matter, unless it is prepared to expend unlimited sums in controlling the nuisances needlessly created by the new buildings in its district, and even then it is doubtful whether its efforts might not be foiled by legal difficulties. Again, the sanitary authority might seek from the Local Government Board powers to subject new buildings to regulations, but to be of use here (as elsewhere), the powers should obviously have been possessed beforehand. As it is, within the past five or six years have grown up in this place, unchecked and uncheckable, in a concentrated form, *all* the evils that sanitary legislation has been, after a fashion, striving to amend since 1848, and there has been imposed upon the district and its ratepayers a permanent incubus of unwholesomeness, and perennial source of heavy expenditure in sanitary rates.

The story is not a solitary one, nor is it uncommon. There is hardly a district in England of which similar stories might not be told; and in no district can the evils arising out of this state be more largely studied than in the environs of London. But there, as a rule, the unrestrained misdoings do not put on the same gross forms as in the provinces, but they are scarcely the less mischievous on that account. Travellers in mining and manufacturing districts, where villages are apt to spring up in the vicinity of new pits and manufactories, will have had occasion to observe, with few exceptions, that these villages faithfully reproduce the sanitary evils which for the past thirty years the kingdom has been striving, after a fashion, to suppress.

Are we so barren of men of legislative capacity that no one is to be found who can take up this matter from its depths, and not merely its surface? Are we condemned to be perpetually striving to arrest the growth of sanitary negligences by cutting off the spray and leaving the root untouched? Is it a necessity of British legislative procedure in sanitary matters that we must dole out such measures as

we possess for arresting evils in their inchoate state in partial minimised doses? Have we no statesman who can devise a Public Health Act, and induce local authorities willingly to accept one, which, while containing the substance of the present Act, shall also contain provisions which shall give to every sanitary district of the kingdom the power of securing itself from fundamental errors in the construction of new buildings necessarily productive of unwholesome conditions, and, we may add, from modes of conducting any trade within its boundary so as to become a nuisance?

There are certain fundamental sanitary principles, as affecting buildings and nuisances, which ought to be dealt with by general statute, and not by local option. Until this be done, we shall witness the good effects obtained by our efforts in one direction counteracted by the evils determined indirectly by the same efforts in another. Or rather let us say, in view of the stationary mortality of the kingdom, the good we do is masked by what we leave undone. In seeking to stem the tide of sanitary negligence in the kingdom, we have parodied with our legislative mop Mrs. Partington's efforts to stem the Atlantic. Let us hope that with a change of Ministry a change of thought may follow on this grave subject among our statesmen and administrators.

Annotations.

"Ne quid nimis."

UNIVERSITY OF LONDON ELECTION.

WE have no intention of attempting to indicate to the members of Convocation the individual upon whom their choice should fall in the selection of a candidate to represent the University in Parliament. We strongly sympathise, however, with that section of the graduates who think that, other things being equal, or nearly equal, the preference should be given to a member of the University. Among the graduates of the University are numbered a great many men who are in the fore-front of the literary, scientific, and legal professions in this country, and by any one of whom it would be an honour to be represented, and it would seem strange and ungracious to select their own candidate from outside the pale of Convocation while many other constituencies have shown themselves proud to be represented in the House by a London graduate.

Members of the University have complained, and justly, upon the snubbing the University has at times received from the Senate when preference has been given to non-graduates in the filling of official positions in the University itself, and it seems to us that the graduates will make a great mistake if they do not embrace this opportunity of sending to Parliament a man who in some degree owes his eminent position to the training that the University has imposed upon him. The graduates should, in the interests of the University, seize any chance of saying as it were to the nation: "This eminent man, whom we are proud to send to Parliament, as our representative, is a graduate of our own University, and is the product of an institution established within the memory of most, amidst jeers and insults, but which is able to send to the House of Commons a member at least as illustrious and as honoured as any who are sent from the old universities of the country." If this were done the success of the candidate in the House would increase the success of the University, and honours earned by him would reflect a lustre upon those who sent him.

We do not wholly subscribe to the dogma lately propounded by Dr. Lyon Playfair that a University member is to be selected for academical and not political reasons, and that once elected he is not to be disturbed without very grave and exceptional cause. The University constituencies are composed entirely of educated persons who are frequently capable of understanding and looking at political facts with a minimum amount of party bias, and the judgment of these constituencies upon the chief questions of the day ought to be valued and respected by Governments and by the people. A University representative ought to be allowed, we admit, a large amount of political freedom, and provided his votes in Parliament be given honestly as reason and logic dictate, he would be leniently treated by his constituents, who are not less logical and reasonable than himself. When unreasonable votes are given, however, purely for party reasons, and at the dictation of a party chief, or when views are abandoned, not from conviction, but because the holder of them is in a minority (as has been done by the present member for the University of London), then the constituency has a right to speak its mind on the conduct of its representative.

CRUELTY TO WOMEN.

WE have a serious duty to perform; and we cannot shrink from it. The public are, probably, not aware of the cruelty which is being inflicted on a large class of the community by the practice of keeping shop-women standing during the hours of business. In some of the large establishments daily patronised by ladies of fashion the permanent injury done to the young persons engaged is of alarming proportions, and it is time to protest. Young women come up from the country in full health, and are rapidly reduced to a condition which practically condemns them to life-long suffering. So fatuous is the discipline in many of the large houses, that if a girl is seen to lean for a few moments for relief in her weariness she is reprimanded, and if the offence (!) be repeated, dismissed. This cruelty—we can use no milder term—is one which society or, if need be, the law, must put down. We have not adverted to this painful subject until compelled to do so by the most conclusive evidence that the practice of keeping girls standing during business hours is a large factor in the causation of the most distressing diseases. The public will aid our endeavours to put a stop to this evil by interfering as opportunity offers; but an appeal must be made directly to the tradesmen, especially of the large retail drapery establishments in the metropolis. We especially invite communications from firms who are willing at once to provide sitting accommodation for the young women in their employ, for use during the intervals of personal attendance on customers. The names of these firms we will publish in a special list, and by this—and other—methods of enforcing the reform so urgently needed, strive to eliminate at least one of the many remediable causes of disease.

DR. BUZZARD ON CERVICAL PARAPLEGIA.

IN a very valuable paper in *Brain* for April, Dr. Buzzard considers several varieties of cervical paraplegia. He relates four cases, each well deserving careful attention, whether from a scientific or a practical standpoint. In the first case, a patient aged thirty-five, there was, as the necropsy showed, hypertrophic cervical pachymeningitis, with transverse myelitis; the symptoms were incomplete paralysis of the arms and legs, with pseudo-neuralgic pains and wasting of muscles. A point of particular interest in this case was that it occurred in a syphilitic subject; death occurred by cerebral softening, consequent upon thrombosis of the basilar artery, and this vessel presented the well-known appearance of syphilitic endo-arteritis. Under specific treatment the patient had improved remarkably, for a time, in the state of

his limbs. The evidence on which the hypertrophic pachymeningitis was attributed to syphilis is worthy of attention. Dr. Buzzard thinks that disease of spinal arteries like that of the basilar is the road by which the pathological change in question was produced. A vessel near the central canal was found by Dr. Sankey, who examined the specimens microscopically, to contain an ante-mortem clot. The vessels of the white and grey matter generally had their walls covered by new cells, so that their structure in places was quite obscure. In a second case stiffness and aching of the right arm was followed three months afterwards by loss of power in the left arm and leg, atrophy of the interossei muscles of the left hand, and some anæsthesia of the right arm. No distortion of the spinal column was observable, but there was some tenderness when the fourth cervical spine was pressed. Recovery took place with some spastic rigidity of left limbs, under treatment by rest. A strong phthisical history in this case pointed to strumous disease of the cervical spine as the probable cause of the paraplegia. A very similar condition of spastic rigidity of limbs remained in the third case Dr. Buzzard relates. It was that of a youth who, in diving, struck his head against the bed of a river, and immediately lost completely the power of all four limbs. He gradually recovered from what was probably "a broken neck." The fourth case was one of Pott's disease about the third cervical vertebra, causing loss of power in all four extremities, rigid lateral flexion of the head, and paralysis of the diaphragm. Recovery of power to a very great extent occurred after an attack of double pneumonia, which for some time seemed likely to prove fatal. In these three cases the spastic rigidity and excessive tendon-reflex consequent on secondary degenerations of the cord were well marked.

This paper is a very important contribution to our knowledge of diseases of the spinal cord.

NETLEY HOSPITAL.

WE regretted to see in the *Gazette* of the 4th inst. the appointment of a commandant to Netley Hospital in succession to Colonel Stewart. We had hoped that advantage would be taken of the removal of that officer to command a brigade in Madras to get rid of the anomaly of a discharge depôt for time-expired men within the precincts of a hospital for invalids. But this, it seems, is not to be done. It would perhaps be too much to expect H.R.H. the Field Marshal Commanding-in-Chief to sacrifice any patronage, however trifling, even in the interests and for the comfort and welfare of our invalid soldiers. We have repeatedly called attention to the evils attendant upon having a number of idle men, not always of the most temperate habits or exemplary conduct, hanging about the hospital, and the unnecessary expense incurred in keeping up in connexion with it a military staff. This might easily be remedied by forwarding the time-expired men, on arrival in England, to the Brigade Depôts of their respective corps, or, in the few instances in which this could not be done, to Aldershot, where they would be under strict military discipline, and where suitable employment could be found for them till their period of service was terminated and their discharge documents completed. In addition to the benefit to the invalids by such a course, a saving of upwards of a thousand a year would be effected. We commend the matter to the consideration of Mr. Childers, and trust he may see his way to get rid of this abuse before the next Army Estimates are brought forward. The circumstances which called for the appointment of a Military Commandant in the first instance no longer exist, the Warrant of 1st September, 1877, having conferred on the senior medical officer the command of the hospital staff and of all invalids and soldiers in or attached to the hospital, and made him responsible for everything connected with the establishment. We are at a loss to understand on what plea an expensive military staff can still be kept there, and why an invalid hospital should be converted into, or at least have attached to it, a depôt for the discharge of time-expired soldiers.

PROFESSOR LISTER AT THE BRISTOL MEDICAL SCHOOL.

THE annual public distribution of prizes in connexion with the Bristol Medical School took place on Monday, May 3rd. Professor Lister, F.R.S., presided. The report of the Faculty contained the record of the removal of the Medical School from the premises in the Old Park, which it had occupied since the year 1834, and which had long proved inadequate to the increased wants of the school, and its establishment in the new buildings erected for it by the Council of University College, Bristol, with which institution the school is affiliated. During the past session the first course of lectures in connexion with the chair of hygiene and public health had been delivered by Dr. David Davies, medical officer of health to the city of Bristol. After the reading of the list of names of students of the school who had been successful before the various examining bodies, the prizes and certificates of honour were presented by Professor Lister, who then, in the course of a most able and interesting address, spoke of the many advantages incidental to the existence of a medical school in such an important provincial centre as Bristol, and gave the students much sound practical advice on the mode in which their studies should be pursued. At the close of his address a most enthusiastic vote of thanks was accorded to Professor Lister.

Prior to the distribution of prizes Professor Lister was entertained at luncheon by the staff of the Bristol Royal Infirmary, and afterwards gave a demonstration before an assemblage of about two hundred medical men and students on the method of application of his antiseptic system, choosing as a subject for illustration a case of deep cervical abscess. On the following day he gave a similar demonstration in the operating theatre of the Bristol General Hospital before a crowded audience, selecting on this occasion a case of abscess connected with disease of the hip-joint in a child. Everywhere Professor Lister was received with an enthusiasm and cordiality which must have been most gratifying to him, as indicating the progress amongst the members of the medical profession of a belief in the principle which he has so much at heart.

CHIAN TURPENTINE IN CANCER.

THE prospect of a remedy for a disease hitherto deemed incurable, in the majority of cases, has very naturally created wide-spread interest amongst the public and the profession. The new treatment is on its trial, with the best wishes of every humane person. Care must be taken not to excite false hopes, and so to conduct the investigation that the conclusions arrived at shall commend themselves for scientific exactness and freedom from prejudice. In the first place, it is manifestly important that the nature of the cases treated be placed beyond doubt. Many cancers are unmistakable through their whole course, whereas the character of others is open to question. Every therapeutic inquiry presupposes accuracy of diagnosis. In the next place, unless those who administer Chian turpentine employ the same agent it will be useless to test their imperative results. Herein lies a very great difficulty. Some of our leading authorities on materia medica are very sceptical as to the source and characteristics of Chian turpentine, and Professor John Clay of Birmingham, who has introduced the agent as a new treatment for cancer (THE LANCET, March 27th, 1880, p. 477), thus expressed himself in our last issue:—"As the purity of the drug is an essential

condition of successful treatment, I cannot hold myself responsible for the validity of many of the trials which are now being made, nor can I admit that they constitute a fair test of the new method of curing cancer." This protest is a warning that, unless great care is exercised, the experiments on foot will lead to endless discussions instead of precise conclusions. What are Mr. Clay's tests for the purity of Chian turpentine? It is very important to know the characters and sources of the drug which he has employed thoughout his investigations, and our columns are freely at his disposal for any information he may furnish on the point, which should be settled at the very threshold of the research.

NERVE-CENTRES IN LEPROSY.

S. TSCHIRIEW of St. Petersburg describes the condition of the spinal cord in a case of leprosy, in the last issue of the *Archives de Physiologie*. He mentions that the observations of Danielssen and Boeck in 1848, as to rarefaction of the ganglionic cells of the grey matter, with altered consistency and volume of the cord, have not hitherto been verified, nor received the attention they merited. His new contribution rests upon the examination of the spinal cord and the skin of the finger from a leper under the care of Dr. Hillairet at St. Louis Hospital (Paris) in 1875. No clinical details are given, save that the patient, who belonged to a rich Creole family of Mauritius, had for many years suffered from the disease. There were no notable naked-eye changes in the viscera or in the spinal cord. The microscope revealed the following alterations:—In the cervical region the left posterior cornu was slightly thinner than the right; the central canal was full of small lymphoid cells, and its walls similarly infiltrated; whilst scattered through the grey and white substance were numerous elongated nuclei. In the middle part of the cervical region there were some small hæmorrhages in the left posterior cornu, with thickening and cellular infiltration of the lymphatic sheaths. But there appeared to be fewer capillaries and small vessels than usual in the grey matter. In fact, whilst the anterior cornua were for the most part unchanged, the posterior cornua showed notable diminution in size and in number of their nerve-cells. The grey matter in these regions appeared more opaque and granular than normal, and did not stain readily. In addition to these changes there were in the dorsal and lumbar regions similar atrophic changes in the cells of Clarke's vesicular column. The anterior nerve-roots were natural, and the posterior nerve-roots showed only slight thickening of their lamellar sheaths. The changes in the skin of the parts examined consisted in thinning of the epidermis, and an infiltration of the dermis and subdermal connective with small lymphoid cells, especially around the bloodvessels, the arteries showing marked thickening of their inner coats. Some of the nerve-fibres were replaced by bundles of connective tissue surrounded by cellular infiltration. Although the examination does not strike us as being very complete, it is worthy of note, owing to the paucity of facts at present observed with regard to the state of the spinal cord in leprosy. The author remarks upon the integrity of the anterior cornua as according with the unaltered state of the muscles. The change in the posterior nerve-cells appeared to be simply an atrophic degeneration. He raises the question whether the lesion of the nerve-cells is primary, or whether it depends upon other lesions involving the supposed centres regulating nutrition. An interesting point was the coincidence of the localisation of the morbid process in the posterior cornua in a case of anæsthetic leprosy, with the peripheral nerve-changes described. The change in the cornua was not necessarily accompanied by lesions of the nerve-roots; but further inquiry might profitably be directed to the spinal ganglia and nerve-trunks in the endeavour to ascertain whether there is any change in these structures proportionate to the extent and degree of anæsthesia observed during life.

MISS LONSDALE AND GUY'S HOSPITAL.

IF in writing the extraordinary article on "The Present Crisis at Guy's Hospital," published in the April number of the *Nineteenth Century*, Miss Lonsdale merely wished a little brief notoriety, she has probably succeeded beyond her most sanguine expectations; but if, on the other hand, she intended rather to facilitate the working of the obnoxious nursing innovations, her efforts have not been quite so successful. The current issues of the *Nineteenth Century* and the *Contemporary Review* contain an aggregate of no less than four replies to Miss Lonsdale's fantastic charges. In the former periodical appear the answers of Sir William Gull, Dr. Habershon, and Mr. Alfred J. Henriques; and in the latter, that of Dr. Moxon. It may be a question whether or not the marshaling such a force to combat the phantom which Miss Lonsdale's lively fancy had called up be not extravagantly disproportionate; but it is perhaps just as well that the truth should be distinctly and plainly told. Though Dr. Moxon's reply is upon the whole the smartest, and, in a literary sense, the cleverest, the replies of Sir William Gull and Dr. Habershon are, both from the professional and the outsider's points of view, the most convincing and conclusive. Sir William Gull characterises Miss Lonsdale's proposition—that a medical man is no more necessarily a judge of the details of nursing than a nurse is acquainted with the properties of certain drugs—as preposterous and absurd, adding, "Every medical man, if not the public in general, will feel this to be so." Dr. Habershon states calmly and precisely the chief objections to the "new system" of nursing introduced into Guy's Hospital, as compared with the old, and points out some of the risks and dangers to which patients may be exposed through the officious and self-confident ignorance of the new order of sisters. On the whole, Miss Lonsdale's exaggerations and misstatements have done more to damage the cause she undertook to defend than its worst enemies could have wished.

MEDICAL PRACTITIONERS IN FRANCE.

IT has frequently been pointed out that the proportion of medical practitioners to population in England and Wales has declined in recent years; and Dr. Bertillon in an article on France, contributed to the "Dictionnaire Encyclopédique des Sciences Médicales," calls attention to a similar decline across the Channel. In 1846 there were in France fifty-one medical practitioners to each hundred thousand of the population; in 1866 this proportion had declined to forty-eight, and in 1876 it had further declined to forty. It is pointed out that the decline of practitioners was confined to the class called "officiers de santé," whereas the proportion of fully qualified practitioners in 1876 was almost identical with that which prevailed thirty years before. In comparing the supply of medical practitioners in France and England, Dr. Bertillon notes that while in France there are but 40 to each 100,000, the proportion is equal to 66 in the United Kingdom. According to the last issue there were 22,516 names on our Medical Register on the 1st of January last, equal to 65·2 per 100,000 of the estimated population of the United Kingdom at the middle of the present year. It is evident, therefore, that the English population is far more liberally supplied with medical practitioners than in France; and whereas in the United Kingdom there is a medical practitioner to each 1532 persons, in France the proportion is but one practitioner to each 2500. Dr. Bertillon attributes this advantage, in the way of greater facilities for obtaining medical assistance enjoyed by the English popula-

tion, to the law which in England permits the medical practitioner to dispense his own medicines. The French law, on the other hand, which Dr. Bertillon describes as "tracassière et pédante," is that medicine and pharmacy shall be kept perfectly distinct. In rural and sparsely populated districts there can be no doubt that the present law in France is not only fraught with great inconvenience to the public, but probably operates in the way Dr. Bertillon suggests, and keeps down the number of practitioners, and thus deprives the population of that ready access to medical advice which is so generally enjoyed in England. Dr. Bertillon's article contains a table showing the proportional distribution of medical practitioners among the eighty-seven departments of France. In 100,000 of the population there are only 13·6, 14·4, and 17·6 medical practitioners respectively in Morbihan, Haute-Loire, and Finisterre, while it ranged upwards in the other departments to 77·3 in Corsica, 81·5 in Alpes-Maritimes, and 87·8 in Gers. These figures signify that whereas there is but one doctor to 7500 people in Morbihan, there is one to each 1150 in Gers. The small proportion of medical practitioners in the Breton department is attributed to the fact that much of the medical practice is in the hands of the priests. Dr. Bertillon appears to have experienced a considerable difficulty in ascertaining the correct number of medical practitioners in France, and we regret to say there is almost an equal difficulty in obtaining similar information with regard to the United Kingdom. On Jan. 1st, 1878, the number of medical practitioners on the Register of the United Kingdom was 22,841; it was 22,564 and 22,516 successively at the beginning of 1879 and 1880. We have good reason to believe that this decline in the number of practitioners is more apparent than real. The registrar of the Medical Council has been endeavouring during the last year or two to correct the Register by removing therefrom the names of deceased practitioners of whose death no official intimation has been received. If the Register could be once thoroughly corrected it would soon become a source of valuable information on the vital statistics of the profession, for which purpose it is now comparatively valueless. We, at any rate, decline to believe that there has been an actual decrease in the number of medical practitioners in the United Kingdom during the past three years.

THE INDIAN VACCINATION BILL.

THE Punjab Hindoo Association had this Bill again under consideration at their meeting on the 6th March, Dr. S. W. Leitner, the President, in the chair. The proceedings were founded chiefly upon the speech of the promoter of the Bill, the Honourable Syad Ahmed Khan, when, in the meeting of the Supreme Legislative Council of February 28th, 1880, he moved that the Bill should be referred to a Select Committee—a speech which has already been commented on in THE LANCET. The Punjab Association in a former meeting had deprecated compulsory vaccination and the putting of a new sanitary primer written by the Sanitary Commissioner with the Government of India (a work which does not appear as yet to have reached this country) into the hands of schoolboys and of half-educated people for the information it contains as to the source from which vaccine lymph is obtained. They maintained, and still maintain, that in the Punjab at least Hindoos are, as a rule, unacquainted with this source, and that the knowledge of the lymph being derived from the *cow* would, on religious grounds, be fatal to the practice of vaccination among them, as the use of such lymph, or to abet its use, would be to commit, or cause to be committed, a ceremonial impurity. Syad Ahmed Khan sought to traverse the argument of the Association in his speech of February 28th, and urged that the source of vaccine lymph was well known among Hindoos, and that in consequence Dr. Cunningham's primer could not exercise the baneful influence upon the practice of vaccination among Hindoos that the Association averred would follow its issue. Among other matters in support of this argument, it was mentioned that the name by which vaccination had been known in India since its introduction, and as distinguishing the operation from inoculation, was *gau thau sitla*, literally translated "cow-udder small-pox." But to this the Association answer that the Hindoos of the Punjab indisputably did not understand what *gau thau sitla* meant, and were unaware that vaccination had anything to do with the cow. The Association passed a resolution, to be submitted to the Select Committee of the Supreme Government to which the Bill is referred, reiterating their objections to the compulsory clauses, and the circulation of the passages relating to vaccination in Dr. Cunningham's primer; expressing also their regret that attention had not been given to procuring vaccine lymph from the buffalo (which would not affect religious susceptibilities), and not from the cow.

REMOVAL OF A LARGE INTERSTITIAL UTERINE FIBROID.

DR. GAILLARD THOMAS of New York records, in the current number of the *American Journal of Medical Sciences*, a case of successful removal of a large intramural fibroid tumour of the uterus. After pointing out that subperitoneal and submucous fibroids can now be efficiently dealt with by the surgery of the present day, he relates the case "not as an isolated and desultory example of a remarkable operation, but as an illustration of a system which, by its efficiency and simplicity when applied to appropriate cases, will in the future, I trust, accomplish a great deal of good where at present very little effort at surgical relief is ever made." The case was that of a woman, thirty-six years of age, married fourteen years, with one child twelve years old. From April until December, 1879, when she came under care, she had been subject to profuse menorrhagia, and was in a very weak and anæmic condition. The uterus was much enlarged, the fundus extending to a point midway between the umbilicus and ensiform cartilage. The cervical canal was distended, and the posterior uterine wall, including the cervix, was immensely hypertrophied out of all proportion to the anterior. After consultation, and in view of the large and rapidly-increasing size of the tumour, and the comparatively healthy condition of the subject, the operation was performed on Jan. 5th, 1880. Sims's largest speculum was introduced, and a portion of the depending posterior uterine wall cut out by means of a pair of long-handled scissors. Some free bleeding ensued, but was disregarded, and it ceased as the operation was proceeded with. A strong tenaculum being fixed in the posterior lip of the wound in the uterine wall, the opening was enlarged by the finger, and a strong large grooved-director passed, upon which the uterine wall was incised over the tumour high up into the uterine cavity. The tumour coming freely into view, it was fixed by vulsellum forceps, and detached from its bed by means of the "spoon-saw" for about an inch and a half all round. The growth was then removed piecemeal by scissors and the spoon-saw, and finally the remaining third was removed *en masse* by the latter instrument. The operation lasted eighty minutes. Save after the first incision, there was almost no hæmorrhage, and the patient bore it exceedingly well. The large cavity left was syringed out with strongly-carbolised water, and stuffed with carbolised cotton. The patient made an uninterrupted recovery. The tumour —a typical myo-fibroma—weighed 2 lb. Dr. Thomas states that during the past ten years he has removed many large submucous tumours, but only once before one of truly interstitial character; that weighed 8 oz., and was removed by the

same procedure, except that it did not require dismemberment by the scissors.

FARR TESTIMONIAL FUND.

WE this week give prominence in our advertising columns to an appeal for co-operation in securing the success of a testimonial, to mark the general appreciation of the value of the long public service of Dr. William Farr, C.B., F.R.S. The claims of Dr. Farr to public gratitude for his invaluable assistance rendered to the cause of public health and sanitary progress, are not solely, or even perhaps mainly, based on purely medical grounds. It is eminently satisfactory, however, to find the medical profession so worthily and so influentially represented in the General Committee, which has charged itself with the pleasant duty of doing honour to Dr. Farr, whose name will ever be inseparably connected with health-progress in England. We hope, and confidently anticipate, that the efforts of the committee will be attended with a continuance of the success which is indicated by the constitution of the Committee and by the first list of subscriptions.

TRICHINOSIS AND TRICHINOSIS.

DR. SPENCER COBBOLD, in a very brief letter to *The Times* of the 3rd inst., relative to Mr. W. H. Power's report to the Local Government Board on an outbreak of fever that proved to be trichinosis, on board the reformatory ship *Cornwall*, writes: "I wish to state that there is not in the said report a particle of evidence that the outbreak in question had anything to do with trichinosis." He then proceeds to observe that the report, nevertheless, is "both interesting and valuable—more so, probably, than if the outbreak had really been due to trichinosis, since it not merely points to the existence of wandering rhabditiform larval parasites as a possible cause of dangerous febrile symptoms, but also as showing that we ought rather to look to an indifferent water-supply than to diseased meat as the primary cause of the outbreak."

What Dr. Cobbold apparently wishes to state is, that in his opinion the nematode parasite discovered by Mr. Power in the fatal case of illness on board the *Cornwall* was not the trichina spiralis with which the profession is tolerably familiar, and to which Mr. Power's conclusions seem to point, but some other seemingly unknown form of nematode parasite, for the source of which, as it affects man, we should look to an indifferent water-supply. Dr. Cobbold's opinion upon a question of helminthology will properly carry great weight, but something more than even his opinion, its absoluteness notwithstanding, will be needed before it can be received that the parasite figured by Mr. Power is not trichina spiralis. Mr. Power himself hesitates, from the microscopical character of the parasite alone, to affirm that it is so, but the tendency of the evidence to be derived from the outbreak of illness is to this conclusion.

Dr. Cobbold's statement that "we ought rather to look to an indifferent water-supply than to diseased meat as the primary cause of the outbreak," will excite amazement in the face of the evidence advanced by Mr. Power. The water-supply of the *Cornwall* was and is common to the ship and a considerable population on shore, but the disease was confined to the ship. The succession of the cases admitted of explanation if the cause were assumed to be connected with some article of food consumed on board, but not otherwise, so far as the seemingly exhaustive examination by Mr. Power went. Dr. Cobbold would substitute the vaguest of suggestions for the results of a careful investigation!

Dr. Cobbold is not happier when he touches upon the important question raised by Mr. Power of the possible relation of certain febrile seizures to the wanderings of as yet undetected and undetermined parasites. Mr. Power's suggestions are already bearing fruit in the meetings of the Pathological Society; Dr. Cobbold's observations simply go to raise an undefined but disquieting if not alarming spectre in the columns of a daily paper! As between "trichinosis" and the existence of hitherto unsuspected "wandering rhabditiform parasites," we apprehend that the public will not be apt to consider the latter as the more consolatory phrase, particularly when they come to know that their effects upon the human system may be quite as correctly described as, and actually constitute, a "trichinosis." When Dr. Cobbold writes that there is not "a particle of evidence" to show that the outbreak on board the *Cornwall* was "trichinosis," he merely means trichinosis of a particular sort, and at present we have only the bare statement of his opinion, unsupported by "a particle of evidence," in confirmation of it.

INSPECTION OF THE ARMY HOSPITAL CORPS AT ALDERSHOT.

THE detachment of the Army Hospital Corps at present undergoing a course of instruction in ambulance and stretcher drill at Aldershot was inspected on Monday last by Sir William Muir, K.C.B., Director-General of the Army Medical Department, who, *ex officio*, commands the corps. The parade was formed up under Surgeon-Major Sandford Moore, and, in addition to the Army Hospital Corps detachment, a class of thirty-five of the young medical officers who have recently passed out from Netley, and who have finished their drill, were also present. On the arrival of Sir William Muir, who was accompanied by Surgeon-General William Munro, C.B., Brigade-Surgeon H. Reade, V.C., and Captain Pringle, A.H.C., the class was put through the manœuvres pertaining to ambulance and stretcher drill, and acquitted themselves to the satisfaction of the inspecting officer. Different medical officers were called out from the ranks and tested their knowledge of company and stretcher drill. After the inspection Sir William Muir and his staff were entertained at luncheon in the medical officers' mess.

TORBAY HOSPITAL.

THE recurring quarrels between the lay authorities and the medical officers of the various hospitals and dispensaries throughout the kingdom threaten to become an "emphatic nuisance." Scarcely a week passes without a fresh squabble. Torquay is the scene of one of the latest of unseemly conflicts. The members of the weekly board of the Torbay Hospital have so managed their affairs that not only has the resident surgeon resigned, but two of the honorary surgeons have withdrawn from the institution; and all, as far as we can make out, because the lay authorities would persist in the belief that they and their matron knew more than the doctors about the medical management and treatment of the patients within the hospital. This is carrying out with a vengeance Miss Lonsdale's doctrine, that medical men do not understand nursing!

CONGENITAL ABSENCE OF PATELLA.

DR. J. F. HARTIGAN, of America, recently attended a coloured female infant for a very rare deformity of the knee. The right lower limb was perfectly normal, but the left knee was flexed forwards, or over-extended, so that the front of the leg formed an acute angle with the front of the thigh; the sole of the foot was directed upwards, and the toes pointed to the groin. The leg could be brought into a straight line with the thigh, but not flexed in the usual way; then with gentle pressure, or under the influence of the child's will, the malposition was reassumed; but, contrary to what has been found in some similar cases, it was

not at once strongly jerked forwards. The femur, tibia, and fibula appeared to be quite sound, but there was no trace of the patella to be felt anywhere, and the extensor tendon could not be recognised under the skin. The treatment adopted was to retain the limb in the straight position, and gradually flex it; and this has been attended with great success, the child being now able to run about and bend the joint backwards to the usual extent.

NERVE-GRAFTING.

Dr. J. GLUCK, of Bucharest, lately brought before the ninth congress of the German Society of Surgery at Berlin some interesting results of experiments in nerve-grafting. He cut out a portion of the sciatic nerve of a fowl, and then removed a similar portion of the same nerve from the leg of a rabbit, and placed this in the leg of the fowl, uniting the two ends by sutures. The nerve united, and the paralysis caused, of course, by the excision of the piece of nerve was recovered from. He repeated the experiment, and exhibited the successful results, showing the fowls with full restoration of power. He was led to these experiments by the result of a case of nerve suture. Paralysis of the median had resulted from extensive destruction of the tissue of the arm by gangrene. Dr. Gluck cut down on the radial nerve and found that part of the nerve was destroyed. He united the two ends by sutures, and the man regained the power of motion, which he had entirely lost. Of course, the experiments in nerve-grafting in animals do not warrant the expectation that a similar result could be obtained in the case of the human subject. It is well known that the union and regeneration of nerves occur with greater facility in the case of the lower animals than in man.

MEDICAL SOCIETY OF LONDON.

THE annual conversazione of this Society was held at the Society's House on Monday last; there was a large attendance of the Fellows and visitors. The oration was delivered by Dr. W. H. Broadbent, the subject being, "The Pulse, and some of its Indications." The President proposed a vote of thanks to the author, which was carried by acclamation, and he was requested to publish the oration *in extenso*. During the evening a selection of music was performed.

SURGEON TO THE NEW VICEROY OF INDIA.

SURGEON-MAJOR JOHN ANDERSON, Army Medical Department, has been appointed by the Marquis of Ripon surgeon on his personal staff as Governor-General of India. Mr. Anderson served for many years in India in the Royal Horse Artillery, and has lately been doing duty at the Royal Military College, Sandhurst.

IN the despatch of Lieut.-General Sir F. S. Roberts, published in the *Gazette* of May 4th, occur the following passages:—"In the late officiating Deputy Surgeon-General J. H. Porter, A.M.D., I found an administrator of high capacity and experience. By his lamented death Her Majesty's service has lost a most distinguished officer. . . The arrangements at the British and Native Field Hospitals, superintended by Surgeon-Major S. B. Roe, A.M.D., and Surgeon W. Coates, I.M.D., respectively, were all I could wish."

THREE successful cases of ovariotomy, performed respectively by Drs. Pilcher, Cayley, and Charles, of Calcutta, are reported in the *Calcutta Medical News*. Antiseptic precautions were adopted in each instance. These cases are stated to be the first of their kind in the Indian city which had terminated favourably.

MRS. DEEBLE, Superintendent of Nurses, together with six of the Sisters, who were sent to do duty in the military hospitals during the recent campaigns in South Africa, landed at Southampton, and returned to Netley on Wednesday, the 5th inst. Mrs. Deeble suffered from a severe attack of typho-malarial fever in the Transvaal, but has greatly improved in health during the voyage from the Cape of Good Hope to England.

AT the Leeds County Court, on the 30th ult., before Mr. Serjeant Tyndal Atkinson, judge, Mr. C. H. Harral, M.R.C.S., sought to recover from William Robinson, who had been a patient of his, 8*s*. 6*d*. for medical attendance. After hearing evidence on both sides, his Honour held that, as the plaintiff had only qualified as a surgeon, he could not recover for medical attendance. Other claims of a similar character were thereupon withdrawn.

WE regret to record the death of Surgeon R. H. Robinson, of the Madras Medical Service. Dr. Robinson entered the service in 1877, and at the time of his decease was in medical charge of the 39th Regiment Madras Native Infantry, which has been engaged in quelling the Rumpa rebellion. The cause of his death was malarial fever, contracted in the feverish locality in which the regiment was stationed.

THE Council of the Society of Arts have, we learn, decided to summon a public Conference to consider the question of supplying London with pure water. The date for the Conference has been fixed for Monday, the 24th of May, and succeeding days. The arrangements for the Conference are now being considered by a committee, and full announcements are to be made as early as possible.

AT a duly convened meeting of the Governors of the National Orthopædic Hospital, held on the 28th ult., it was resolved that the name and title be altered to the "National Hospital for the Deformed," for the treatment of distortions of the spine and all malformations of the human frame; it being considered that this title and description more palpably define the objects and practice of this charity.

THE Council of the Association of Poor-law Medical Officers will best serve the interests of the body of practitioners they claim to champion by restraining their impetuous zeal for a while, at least, until the new President of the Local Government Board has had time to formulate his policy, before they invade his sanctum with any petition of rights or privileges.

THE Legislature of Connecticut has recently passed an Act authorising the State Board of Health to prepare rules and regulations for the examination of railway *employés* in regard to colour-blindness.

THE appointment to the chair of Natural Philosophy in the University of Aberdeen, vacant by the death of Professor David Thomson, is, we understand, to take place on the 13th inst.

DR. MICHAEL FOSTER, F.R.S., Prælector on Physiology, Trinity College, Cambridge, has had conferred on him the honorary title of LL.D. of the Glasgow University.

THE officers of the Army Medical Department at Netley have issued invitations for a ball to be given on the 24th inst. in honour of Her Majesty's birthday.

MR. THOMAS GUTTERIDGE, the well-known lithotomist, died suddenly of apoplexy last Monday, at his residence, Calthorpe-road, Edgbaston, Birmingham.

Local Government Department
IN ITS
PUBLIC-HEALTH AND POOR-LAW MEDICAL RELATIONS.

IN our last issue, we called attention to the important concession made by admitting the President of the Local Government Board to a seat in the innermost council of state—the Cabinet; and showed how this arrangement must practically make the care of local interests an integral part of public policy, and substantially create a Ministry of Health. The multitudinous and hitherto unmanageable business centred under the authority of the President of the Local Government Board consists mainly in the supervision of the local application of the Public Health Acts by sanitary authorities, and the control of the Poor-law system throughout the country. Two large services, or *corps* of medical officers, acknowledge the President of the Local Government Board as their chief; namely, the medical officers of health and the medical officers of Poor-law districts and workhouses, of certain large asylums for imbeciles, the deaf, and the dumb, and special hospitals for infectious or contagious diseases. In all some *six thousand five hundred* members of our profession are engaged in scientific work carried out under the authority of the Department whose head is now a Cabinet minister.

The health of a nation must be the first condition of its real prosperity; and it was simply monstrous to leave the Minister responsible for the preservation of public health out of the Cabinet. While this member of the Government was excluded from the inner council the health interests of the people were necessarily subordinated to other considerations, and could not under the best of circumstances obtain more than a second-hand representation. How disastrous such an arrangement may prove, and how the occasional authority of the Privy Council in matters whereof it has no official cognisance, and in which, therefore, it is incompetent to meddle, is likely to operate mischievously, was made abundantly evident during the recent alarm of plague. It is not taking an unduly grave view of the situation to affirm that if, unhappily, a serious epidemic of this disease had visited the country, or should even now visit it, the sole measures of protection upon which we can depend may at the last moment be rendered of non-effect by the action of the Privy Council subordinating the public health administration of the country and checkmating the action of the Local Government Board, as the central public health authority, by the powers it exercises under the quarantine law. The policy of exclusion by quarantine has signally failed. That vexatious and futile artifice was tersely satirised by Mark Twain in the narrative of his experiences at Bellaggio: "They must keep epidemics away somehow or other, and fumigation is cheaper than soap. They must either wash themselves or fumigate other people. Some of the lower classes had rather die than wash, but the fumigation of strangers causes them no pangs." To rely on any measure of exclusion—even if one could be devised which would keep off disease—is so manifestly short-sighted and fatuous a policy, that we cannot believe it will again be seriously mentioned in any deliberation of State. The President of the Local Government Board is the responsible minister charged with the duty of making the ordinary conditions of life throughout the country so healthful, and providing every district with the means of isolating cases and stamping out epidemic disease in such efficiency, that even the plague shall have been deprived of its terrors. By concentrating the whole sanitary authority in his own hands, as the position the President now holds will enable him to do, many difficulties will be removed and much embarrassment avoided.

Another most important consequence of the change which has been effected will be the recognition of the Statistical Department of the Registrar-General's Office as a recording branch of the central establishment of the Local Government Board. In truth this department has no other intelligible status, and none can reasonably or safely be conceded to it. The returns collected by the Registrar-General are simply the vital statistics of the country, and stand in inseparable relation with the public health. It has long been an anomaly that these returns should be made to an independent department which has been compelled to retain a medical officer specially to inform the Registrar what the figures collected by his agents may chance to mean. It is not in the least degree surprising that, being taken out of their connexion, and treated as the data for independent inferences—by an authority having no official knowledge of the health of the country and no facts whereby to test or interpret the figures submitted to him—they should have been made the bases of wondrous and misleading deductions. Had it not happened that an exceptionally able and clear-sighted medical man stood at the elbow, so to say, of the Registrar-General, and saved him from the worst of possible errors, the consequences might have been disastrous to the public health. As it is, many a great opportunity has been lost, and urgent reforms have been abondoned or postponed under the influence of false inferences derived from figures which were not facts. All this may be amended now that the President of the Local Government Board is so placed as to be able to set aside any objections which may be opposed to the consolidation and harmonious reconstruction of his department of the administration, as a whole.

The duty of medical officers serving under the Local Government Board, whether as officers of health or in the Poor-law districts, will be from this crisis more clearly defined than heretofore. With a view to aid their endeavours as far as possible, and to offer the Health and Poor-law services a special means of making their difficulties known, and their interests apparent, to the profession and the public, we have this day created a distinct department in THE LANCET comprehending all that concerns the "Local Government Board in its Public-health and Poor-law Medical Relations." Communications on the subjects thus classed together will be specially considered, and we hope, with the co-operation of the large body of practitioners who are engaged in these branches of work, to keep our readers of all classes—together with those statesmen who may regard THE LANCET as the organ of the medical profession, and this special department as the organ of the Local Government Board-medical services—fully informed both as to the progress of preventive medicine, and the spirit and enterprise of that important section of the medical profession by whose agency the science of health is to be applied.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Doncaster Rural and other Combined Districts.—This new combination includes the rural sanitary districts of Doncaster, Goole, Selby, and Tadcaster, and the urban sanitary districts of Goole, Selby, and Tickhill. Dr. Mitchell Wilson only entered upon the duties of medical officer of health for the combination in September last, yet he has prepared and presented to each of the authorities a statistical report on the health of the district under its control for the past year, together with much information derived from a personal inspection of the respective districts. He has endeavoured, not unsuccessfully, to give a short statement of the present condition of each district, rather than a complete history of its sanitary progress throughout the year. He has specially noted the state of the water supply in the several districts, wisely judging that it would be more beneficial to deal with a definite subject requiring attention. Beginning thus energetically, we shall look with interest for Dr. Wilson's future reports.

Workington (population 7968).—Dr. John Ward has to report the introduction of "a beautiful supply" of water from Crummock into the town from the 1st August last, and even in the short period of the four months following he thinks he can discover the beneficial effects upon the health of the population from the substitution of the purer fluid for the water previously at command. There was an excess of mortality among infants and children during the year, which Dr. Ward is disposed to assign largely to the effect of an impure house-atmosphere. He enlarges most instructively upon this subject in its relation to particular diseases, and his observations can scarcely fail of stimulating the action of his sanitary authority to remove the evils he describes.

Bishop Stortford Urban and Rural Sanitary Districts.—Dr. W. Ogle reports, as regards the urban sanitary district (population 6250) for 1879 a death-rate as low as 12·3, and of this he observes, that the low mortality "is not an isolated

occurrence, but has been repeated now for three successive years, so that there is fair reason to believe that it is not due to mere accidental fluctuations, but to distinct improvement in the general sanitary condition of the town." There was entire absence of fatal diarrhœa during the year, this being the third year of almost complete immunity from this "dirt-engendered" disease; but, on the other hand, although the town had nearly, if not altogether, been free from typhoid fever for several years, five deaths from that disease occurred in 1879. Typhoid appears to have been formerly very prevalent in Bishop Stortford, but as the sewerage and the ventilation of the sewers were improved, a public water supply introduced, and a better system of removal of filth inaugurated, both typhoid and diarrhœa declined, and the town seemed to acquire immunity from these diseases. The occurrence of five deaths from typhoid in 1879 was a matter, therefore, calling for serious consideration. Dr. Ogle attributes the reappearance of fatal typhoid to the use of water from wells still resorted to, and he objects to the closure of wells liable to pollution being made to rest upon the results of chemical analysis. He records a case in which the water of a well undoubtedly concerned in spreading typhoid was submitted to competent analysts at two separate times, and in each instance pronounced fit for consumption, although the composition of the samples differed widely. An examination of the well disclosed leakage into it from a drain which carried slop-water from the house in which the first case of fever of the particular outbreak occurred. The Bishop Stortford rural district (population 15,806) presents the anomaly of having had a higher mortality (17·2 per 1000 population) during the year than the urban district. What happened in 1879 in this respect happened also in each of the two previous years. In his report on this district, Dr. Ogle relates some instructive examples of the dissemination of typhoid fever by servant-girls sent home when sickening from the disease, and he shows how in these cases the spread of the disease might have been prevented had the sanitary authority been possessed of means by which the first (the imported) case could have been isolated. Referring to the fact of the rarity with which typhoid spreads in a well-to-do house, and the frequency with which it spreads in poor cottages, he has the following remarks:—"The explanation of this, as I take it, is to be found in the fact that in the well-to-do house there are the necessary appliances for cleanliness and a preference for it, whereas in the poor cottage both of these are habitually absent. In the one a clean watercloset; in the other a foul and rarely-emptied privy, giving off to all that use it the emanations from the infected matter thrown into it. In the one an unstinted supply of fair water, and abundance of vessels of all kinds; in the other a scanty supply of more or less impure water, to be fetched often from a considerable distance, and such a lack of utensils, that one cannot avoid the horrible suspicion that not rarely the same vessel that carries refuse out of the house, including the sick-room, serves also at times to carry water into it." He notes the anomaly in this district of the guardians erecting a large oven for disinfecting purposes, *not* the sanitary authority.

Hanley Urban Sanitary District (population, 1871, 39,976, area 1790 acres).—Dr. J. Swift Walker reports for 1879 the highest mortality (25·97 per 1000 population) that had occurred in this borough since 1875. This unusual mortality appears to have been determined by a fatal epidemic of measles during the year. The following is suggestive. A few years ago the Town Council purchased some whitewash brushes, and lent them to persons requiring their houses to be whitewashed, at a cost of one penny per brush lent. The brushes first purchased becoming worn out, a new set was purchased at the beginning of the past year, at a cost of £36. The amount realised by lending during the year was £21, and it is calculated that 3694 houses had been cleansed and whitewashed, so largely had the poorer classes availed themselves of the help thus offered by the sanitary authority.

Barnsley Rural Sanitary Authority.—Dr. Michael Thomas Sadler's report for this district is of much interest for the light it throws upon the sanitary administration of a district characterised by numerous mining villages. Notwithstanding the uphill work of a medical officer of health in such a district, it is obvious, that ground is being gained against long-standing evils. The report gives illustration of the valuable action which may be obtained by parochial committees. It is gratifying to find in this district, in part or wholly, a system of scavenging, including the scavenging of night soil, in force provided by the sanitary authority. Although the medical officer of health had to complain of imperfect performance of the duty by the contractor last year, this had been rectified at the time of the report. The fact of a rural sanitary authority undertaking the scavenging of its district in part or wholly is an important fact. Until this be done more generally it is unlikely that the filth nuisance, which constitutes so considerable a sanitary evil in rural districts, can be effectively dealt with. The death-rate of the district in 1879 was 18·18 per 1000 of the population, the lowest recorded since its formation six years ago; the birth-rate 49·97, nearly 14 per 1000 higher than that usual for England and Wales generally.

Bingham Rural Sanitary District.—Mr. T. Poyntz Wright reports for 1879 a birth-rate of 30·07 per 1000 population, and a death-rate of 18·07. He comments, very justly, upon the want of more hearty co-operation on the part of the public with sanitary authorities, and the impediment to sanitary progress arising from this source.

Hertford Rural Sanitary District.—Dr. Wm. Ogle reports a death-rate of 15·3 per 1000 population for this district in 1879, a rate it would appear somewhat higher than that of the two preceding years. The excess was chiefly marked in the first quarter of the year, and was then largely due to diseases caused by the prolonged and excessive cold of the quarter, aggravated by the bad housing of the labouring population. There appear to be a considerable proportion of cottages in this district which, from their dampness and generally ruinous state, are unfit for habitation, yet to shut them up would add to another grievous evil in the district—namely, overcrowding. The question is one of great complexity and difficulty. Dr. Ogle has the following remarks on another aspect of it:—"Doubtless the objection may be made that the question of decency is outside sanitary administration. With that view I cannot altogether agree. But at any rate the question of space is a strictly sanitary one. Now, the Authority have long accepted 240 cubic feet as the minimum allowance of sleeping-room space for an individual. Scarcely ever, however, do I make an inspection without finding case after case in which this minimum is not attained, and the deficiency often is very great. Here are a few instances of recent occurrence. In one bedroom were eight occupants, having 160 cubic feet a piece. In three adjoining cottages slept twenty-four persons, the average bed-room space being 176 cubic feet to each. In another were ten persons, with 102 cubic feet apiece; in another, nine persons, with 158 cubic feet apiece; in another, ten persons, with 138 cubic feet apiece; and so on in parish after parish. Of the evils that result to health from deficient space one very sad instance occurred during the year. A poor woman suffered from a chronic disease, accompanied by a most fetid discharge. In the small and overcrowded tenement in which she lived a child died from diarrhœa, and the medical man stated that its death was in great part due to the foul atmosphere to which it had been exposed."

Saltley Urban Sanitary District. (Estimated population 5100.)—Mr. Cresswell reports a death-rate in this district of 17·84 per 1000 of the population during 1879, as compared with 19 per 1000 in 1878, and 18·9 per 1000 in 1877. He states that the nuisance so generally encountered in connexion with ashpits, in consequence of the accumulation of their contents, has been effectually remedied by the action of the Board in undertaking their emptying at systematic and frequent intervals.

Watford Urban Sanitary District. (Estimated population 10,000; area 530 acres.)—Dr. Alfred Thomas Brett reports an estimated death-rate of 21·3 per 1000 during 1879. He quotes an instructive instance of a case of typhus received, before the nature of the disease was detected, into the tramp ward at the workhouse. The man who attended to the ward, the head porter, who often visited it, and the head nurse at the Lower Infirmary, to which the case was removed, all caught the disease, and one of the four died.

Small-pox prevalence and fatality in London have steadily increased in recent weeks, and it is more than a year since the Metropolitan Asylum Hospitals and the Small-pox Hospital at Highgate have contained so many patients as they did on Saturday last. The remarkable immunity from small-pox enjoyed by all the largest English towns since the beginning of last year renders the continuous prevalence of the disease in London all the more remarkable. During the last year 458 deaths from small-pox were recorded within the metropolis, while but three (one each in Birmingham, Nottingham, and Manchester) occurred in nineteen of the

largest provincial towns, having an aggregate population somewhat exceeding that of London. This continued and fatal prevalence of small-pox in London points to grave defects in the administration of vaccination in the metropolis which have never yet been properly investigated. At a recent meeting of the Hackney Board of Works it was decided to institute a house-to-house visitation, with a view to discovering all cases of neglect of vaccination. If this visitation were systematically and generally carried out, and were to include an inspection of the vaccination-marks of all children in elementary schools, it would probably exercise a powerful influence on the long-continued epidemic prevalence of small-pox in London.

We are glad to find that Sir Alfred Power, K.C.B., retains in his retirement that interest in the question of the domestic scavenging of towns, as exemplified in the Rochdale "pail and ash-tub system," which he manifested when Vice-President of the Local Government Board, Ireland. In a pamphlet which he has just published he gives the results of certain experiments made in Ireland, at his instigation, to test the value of the Rochdale poudrette as a fertiliser in comparison with other artificial manures, and which tend to show that the money value of the poudrette as estimated by the Corporation of Rochdale—namely, £6 10s. per ton—is fully justified. He briefly reviews the circumstances which give value to the "pail and ash-tub" system of scavenging, referring to the detailed reports by the inspectors of the Local Government Board, England, and of his son, Mr. Wm. Addison Power, one of the inspectors of the Local Government Board, Ireland, on the subject, and he sums up by stating that "in his opinion, *quantum valeat*, the Rochdale system is the best which, so far, has been devised for the Domestic Scavenging of Towns." Sir Alfred Power has done much to promote a just appreciation of the value of the pail-system in dealing with the refuse of towns; and we welcome this pamphlet not only as a contribution to our better knowledge of the subject, but as an indication that he will continue to give his assistance in helping forward its development.

A curious application was made to the petty sessions at Chelmsford, on the 23rd ult., by the Sanitary Authority of the town, for the admission of their medical officer of health to the gaol for the purpose of carrying out the duty required from him by the Local Government Board of visiting and making inquiry in any place where he has information of the outbreak of infectious disease. The application was refused, and seems to have been made under a misapprehension by the Sanitary Authority. Under the old Order of the Local Government Board as to the duties of a medical officer of health the misapprehension could have been understood, but scarcely under the new, which qualifies the restriction as to inquiry and reporting upon outbreaks of infectious disease by the important sentence "in case he is not satisfied that due precautions have been taken." As there is a responsible medical officer attached to every gaol, it is not easy to perceive what necessity there should be for the interference of the medical officer of health within its walls, unless his assistance was required by the gaol authorities. As to the danger of dissemination of the disease outside the walls of the gaol by officers not living within them, the same argument would apply to every private house whatever in which infectious disease occurs.

The Sanitary Authority at Bournemouth is contemplating building an infectious disease hospital. The Commissioners of the town have addressed a memorial to the Inspector of the Local Government Board, who held an inquiry as to the fitness of the site selected for the hospital, protesting against its erection. Their arguments are to the effect that to suppose that so salubrious a locality as Bournemouth will ever need such a hospital is an insult to the town, but the real argument rests on the statement that "the prosperity of those who are engaged in the mercantile pursuits of the place must greatly depend on its character for salubrity, which would be unreasonably impeached by the fact of the existence of, and, therefore, presumed necessity for, a hospital for infectious disorders in the place, especially as the site of the proposed hospital would make it visible to persons coming hither by the South-Western Railway." Let the objectors take comfort to themselves. Visitors to health-resorts are beginning to learn that the existence of an infectious disease hospital is an additional guarantee of *their* safety there. They are beginning to understand that it is important evidence of the sanitary authority doing what within it lies for the protection and welfare of the people of its district and of visitors from infectious maladies.

The Court of Common Council will proceed at their meeting, on Thursday, May 13th, to the election of a medical officer of health for the Port of London, in the place of Mr. Harry Leach, deceased. The Port Sanitary Committee of the Corporation, in accordance with instructions from the Court of Council, have submitted the names of five gentlemen to the Court as eligible for election to the post. The gentlemen thus selected are Dr. B. Browning, medical officer of health for Rotherhithe; Dr. W. Collingridge, of Forest Hill; Dr. F. W. Humphreys, of Trinity-square, E.C.; Dr. J. F. J. Sykes, of Fitzroy-square; and Dr. G. Turner, medical officer of health for Portsmouth.

Several cases of typhoid fever having occurred of late in the fashionable suburbs of Bristol, the medical officer of health of the city, in his report to the sanitary authority, recommends the issue of circulars cautioning the public with reference to the use of contaminated milk, and advising that that article of food should invariably be boiled before being used.

The arrangements at some of the parish relief offices would seem to need revision. For example, at St. George-in-the-East a man affected with small-pox is stated to have been allowed to remain in the small office with some half-dozen other persons for a quarter of an hour. Surely, it would not be difficult to devise means to obviate so probable a risk of infection as is suggested by the above incident.

The Town Council of Salisbury have applied to the Local Government Board for a provisional order to enable them to acquire land for the disposal by utilisation of the town sewage. The question, however, is in suspense in consequence of an objection taken by the Government inspector as to the suitability of the site for the sewage farm.

The Sanitary Committee of the Chelsea Vestry have been charged with the investigation of the cause of several cases of diphtheria in the district. Doubts have been thrown on the efficiency of the drainage.

VITAL STATISTICS.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

The Registrar-General has just issued his quarterly return dealing with English vital statistics for the first quarter of this year. The marriage statistics, however, are for the last three months of 1879, when the marriage-rate was lower than in the fourth quarter of any year since civil registration was established in 1837; its depression, moreover, was greater than that which prevailed in the second and third quarters of 1879. The birth-rate in the first three months of this year, influenced by the long-continued depression of the marriage-rate, was also considerably below the average, and was lower than in any corresponding quarter since 1850. The proportion both of emigration and pauperism, in sympathy with the continued commercial depression, showed a further considerable increase. Notwithstanding the severely cold weather that prevailed, the general rate of mortality was below the average, although the death-rate in London was above the average. Measles, scarlet fever, and whooping-cough showed local epidemic prevalence; the zymotic fatality was, however, comparatively small. The death-rate from fever showed a marked further decline, and, except in London and Bath, the fatal cases of small-pox were exceptionally few. The winter of 1879–80 in length and severity differed but slightly from that of 1878–9. During the four months ending February last there were 65 frosty days, with an average of 6·7 degrees of frost per day. In the corresponding period of 1878–9 the thermometer fell below freezing point on 64 days, which showed an average of 5·1 degrees of frost. The cold of last winter, although more intense than that of 1878–9, was considerably less fatal in its effect upon public health. The annual death-rate last quarter did not exceed 22·9 per 1000, and was 1·9 below the average rate in the corresponding periods of the 41 years, 1838–78. The death-rate among males was equal to 24·1, while it did not exceed 21·9 among females. In the several English counties the death-rate ranged upwards from 16·9 in Westmoreland, to 25·3 in Cumberland, 25·6 in Lancaster, and 25·9 in Nottingham. The rate in the principal urban population of England and

Wales was 24·2, whereas in the rural population it was only 21·0. In the twenty large English towns, including London, the death-rate averaged 25·5; in the several towns, however, it ranged from 18·7 in Brighton, and 19·8 both in Portsmouth and Wolverhampton, to 27·6 in Manchester, 28·7 in Nottingham, and 31·1 in Plymouth. Measles showed epidemic prevalence in each of the three last-mentioned towns. Infant mortality exceeded, while the death-rate at all other ages was below the average. Whooping-cough was the most fatal zymotic disease last quarter, and caused an annual death-rate of 0·77 per 1000 in England and Wales; in London the rate was equal to 2·14, in Salford 2·55, in Ipswich 2·34, and in Rochester and Chatham 2·58. The death-rate from scarlet fever was slightly below the average, although it showed a marked excess in Northumberland, Westmoreland, and Durham. The fatality of the disease was, moreover, excessive in Norwich, Sunderland, Wigan, and Swansea, as well as in many other smaller town districts. The marked decline in the fatal prevalence of enteric or typhoid fever continues to afford satisfactory evidence of improving sanitary conditions. Small-pox caused 197 deaths in England and Wales last quarter, of which 126 occurred in London, 51 in Bath, and but 20 in the rest of England and Wales. Small-pox prevalence showed a steady increase in London during the quarter. Considering the severity of the winter, the return for last quarter may be pronounced satisfactory, especially as it shows a decline of zymotic fatality. Local outbreaks of these diseases, however, causing exceptional mortality, testify to the existence of insanitary conditions favourable to the fatal prevalence of these diseases.

HEALTH OF LARGE ENGLISH TOWNS.

The death-rates in our large towns continue to decline. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5323 births and 3015 deaths were registered last week. The births exceeded by 138, whereas the deaths were 260 below the average weekly numbers during 1879. The deaths showed a further decline of 47 from the numbers returned in recent weeks, and were equal to an annual rate of 21·0 per 1000, against 22·7 and 21·3 in the two preceding weeks. During the past four weeks of the current quarter the death-rate in these towns has averaged only 21·9 per 1000, against 25·8 and 26·2 in the corresponding periods of 1878 and 1879. The lowest death-rates in the twenty towns last week were 14·1 in Brighton, 14·4 in Wolverhampton, 15·6 in Portsmouth, and 17·0 in Sunderland. The rates in the other towns ranged upwards to 25·8 in Oldham, 26·1 in Manchester, 27·9 in Nottingham, 28·1 in Liverpool, and again the highest rate, 36·2, in the borough of Plymouth. The high death-rate in Plymouth continues to be due to the exceptional fatality of measles.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had been 449 and 455 in the two preceding weeks, further declined to 415 last week; they included 133 from whooping-cough, 93 from measles, and 77 from scarlet fever. The annual death-rate from these seven diseases averaged 2·9 per 1000 in the twenty towns, and ranged from 0·7 and 1·1 in Wolverhampton and Leeds, to 3·9 both in Salford and Nottingham, and 16·0 in Plymouth. Measles showed the largest proportional fatality in Plymouth and caused 20 deaths within the borough, making no less than 251 that have been recorded since the middle of November last. The deaths from scarlet fever were somewhat more numerous in Nottingham and Newcastle-upon-Tyne. Five more deaths were referred to fever (principally enteric) in Sheffield. Small-pox caused 18 more deaths in London, but not one in any of the nineteen large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had slowly increased from 167 to 187 in the four previous weeks, further rose to 196 on Saturday last; 49 new cases of small-pox were admitted to these hospitals during last week, against 44 and 48 in the two preceding weeks. The Highgate Small-pox Hospital contained 21 patients on Saturday last, showing a slight decline from the number returned at the end of the previous week.

The fatality of lung diseases continues to decline. The deaths referred to the diseases of the respiratory organs in London, which had declined from 395 to 294 in the four previous weeks, further declined to 260 last week, and were 80 below the corrected weekly average; 153 resulted from bronchitis, and 73 from pneumonia. The annual death-rate from diseases of this class did not exceed 3·7 per 1000 in London last week; the rate from the same diseases in Liverpool was 7·9 per 1000.

THE EXHIBITION OF THE ROYAL ACADEMY OF ARTS.

WERE it our part to do more than briefly notice such works of art as, from various circumstances, present points of peculiar interest to the medical profession, we should find in the present Exhibition a field for criticism which would be wellnigh inexhaustible. But as it is, our task is a more than usually light one. The place of honour from a medical point of view must naturally be given to "A Visit to Æsculapius," by Mr. E. J. Poynter, in which the painter has found a motive for a work of great beauty. The God of Healing, seated in a classic grove, receives the visit of Venus, who has wounded her foot with a bramble. The nude figures of the goddess and her attendants are exquisitely portrayed. The painting, to our mind, is a great advance upon that of last year, and we are glad to see that it has been purchased by the Council of the Royal Academy under the terms of the Chantrey bequest. Near this picture is the portrait of Dr. W. B. Carpenter, C.B., presented to the University of London by members of the Senate and graduates on the occasion of Dr. Carpenter's resignation of the office of Registrar. The work, which is by John Collier, is highly satisfactory. Equal praise must be given to the portrait by Yeames, of Mr. Thomas Turner, the late treasurer of Guy's, presented by the Governors and Medical Staff for the court-room of the hospital. Another portrait of interest is that of Mr. Holden, President of the Royal College of Surgeons, of which it is sufficient to say that it is by Millais, and therefore full of individuality and character. Mr. W. J. B. Carter exhibits a charming portrait of a girl. The painter is a son of Mr. Brudenell Carter, and the present is, we believe, the first portrait which he has exhibited in the Royal Academy. The work is full of promise, the life and animation in the head being especially noticeable. We gladly welcome Mr. Carter to the ranks of portrait painters. A scene from the French Revolution, styled "Parted," by Mr. Claude Calthrop (a brother of Dr. Calthrop, of Highbury), presents an interesting episode of the most dramatic time in European history.

Mr. Seymour Haden contributes six studies in dry point, which, so far as we could see—for they are not hung as the works of such a master deserve to be—are all, in different ways, interesting examples of a process which tests the confidence of the artist's hand more than any other. We would gladly have been able to examine more minutely, too, another frame, in which Mr. Haden has included some studies on zinc of a novel character. The intention is to suggest mezzotinting from nature, with or without preparatory etching. The upper drawing—a view of Harlech—is done at one sitting with the ordinary scraper. This effort to obtain mezzotint effects rapidly, so as to be applicable to out-door work, is very important, and we shall watch Mr. Haden's progress in the study with much interest. Mr. Propert presents three etchings, of which the most important, "Breakers," is a remarkably vigorous and truthful study of a noble sea.

SANITATION IN INDIA.

AMONG the Parliamentary Blue Books recently issued is a "Statement exhibiting the Moral and Material Progress and Condition of India during the year 1877–8." This is a continuation of the series presented pursuant to Act of Parliament, and contains much interesting information regarding our Indian Dependencies, in a very condensed form, arranged under fifteen different heads. Of these, two are of special professional interest—the 10th, "Public Health and Sanitation," and the 15th, which includes the "Health of the British and Native Troops" and "Army

Sanitation." Although the first of these contains much relating to the general health of the population, the registration in India is so obviously defective, and, indeed, is admitted to be so incorrect, that it would be useless to enter into any details founded upon the returns. The deaths from cholera and small-pox in some of the districts are stated; but as the numbers of the population are not given these figures are useless for any purpose of comparison. Both diseases, however, appear to have been less prevalent in 1877–8 than in the preceding year. The number of deaths from small-pox is so great as completely to justify the complaints made of the neglect of vaccination. The reports from the various Divisions show clearly how much the success and extension of vaccination depend upon the zeal, energy, and tact of the medical officers.

Under the 10th Section the medical schools are included. The report made of those in Bengal and the Central Provinces is, we regret to say, unfavourable. In the Punjaub the number of students is increasing, and the condition of these schools in Madras and Bombay was satisfactory.

That portion of Section 15 which relates to the health of the army brings out the remarkable fact that in 1877 the rate of mortality of the British troops was lower than that of the Native—a result which cannot but be gratifying to those who have fought the battle for the improvement of the sanitary condition of the army. During the year the death-rate of the British soldiers in Bengal was 11·64, and of the Native 13·4 per 1000; in Madras, British troops 16·83, Native 15·3; and in Bombay 12·00 and 13·1. In Madras alone the ratio of deaths was higher among the Europeans, but for the whole of India the average mortality was lowest among them. To those who remember the frightfully high rate which prevailed in the European army of the East India Company, the results shown above must be very satisfactory. We are not sanguine that the rates can be kept so low for a series of years, as experience has shown that outbreaks of cholera and fever periodically occur which raise the average—and 1877 appears to have been remarkably exempt from both;—but even in such an event it will be found scarcely to exceed one-fourth—to be certainly less than one-third of the rate which prevailed in former times. We must, however, be careful not to attribute all this reduction to improved sanitation. Two other very important factors have been at work—the younger age of the men serving, and the shorter period of residence in India. The rapid increase of mortality with the advance of age in tropical climates pointed to the great benefit, in the reduction of the death-rate, to be derived from the employment of younger men, and the advantage to be gained by diminishing the period of continuous residence in such a climate was also very obvious. How much of the reduction of the death-rate has been due to these two important changes, and how much to improved sanitary conditions, it is impossible to decide, but the combined result is most satisfactory. We can hardly go so far as the Army Sanitary Commission in their opinion, that "if drink were abolished, and the men's diet and under-clothing were brought into closer relation to the necessities of the country, neither the sanitary nor the medical officer would have much to concern himself about, as far, at least, as regards fatal disease." That every inducement to temperance should be held out to the soldier, and that every care should be taken to clothe him suitably, we most cordially admit, but that such measures would be sufficient to prevent epidemics of cholera or malarious fever is more than doubtful. The great and important results which have attended the care bestowed upon the health of the soldier are sufficient to justify the expense which has been incurred, and to stimulate to further exertions in the same direction; but we fear that to hold out vain and illusory hopes will not tend to promote a wise course of improvement, and can only end in disappointment.

HEALTH OF DUBLIN.—During the March quarter the births registered in the Dublin district amounted to 2650, or 33·7 per 1000; and the deaths to 3165, or 40·2 per 1000. The principal causes of death were as follows:—Bronchitis, 581 deaths; phthisis, 341; convulsions (children), 276; diseases of the heart and organs of circulation, 132; scarlatina, 129; whooping-cough, 113; pneumonia, 107; measles, 90; fever, 83; small-pox, 61; paralysis, 49; cancer, 45; while 48 deaths were due to accident or negligence, 3 were homicidal, and an equal number suicidal.

URTICARIA PIGMENTOSA.[1]

BY JOHN CAVAFY, M.D., F.R.C.P.,
ASSISTANT-PHYSICIAN AND PHYSICIAN TO THE SKIN DEPARTMENT, ST. GEORGE'S HOSPITAL.

THE following case of this rare affection is now under my care:—

Alfred P——, aged fifteen months, was first brought to me at St. George's Hospital, on Jan. 8th, 1880, in the following condition:—The whole skin, with the exception of the palms and soles, is more or less thickly covered with pigmented patches, whose colour varies from bright-red, with a tinge of yellow, to orange and pale buff, a few being of a duller brownish-red tint. The variation in colour is due to different degrees of hyperæmia. The patches are largest and most numerous on the back and chest, fewer, but still of large size, on the abdomen, buttocks, upper and lower extremities, and smallest on the neck, sides of the face, and temples. There are two or three large ones on the left side of the scalp over the occipital and parietal bones. They are all rounded or irregularly oval in outline, and the larger ones (some of which are from three to four inches in their longest diameter) appear to have arisen from confluence. On the neck they are more elongated than elsewhere, very slightly prominent, and more or less parallel to the transverse folds of the skin. They are everywhere surrounded and separated by large tracts of healthy skin. The patches are barely, if at all, raised above the surface, and perfectly smooth, but perhaps a trifle coarser in texture than the unaffected skin. On pinching them up the skin appears of normal thickness, there being no sign of infiltration. Pressure causes the red colour (hyperæmia) to disappear, the pale-buff tint remaining unaltered. On two of the patches over the left shoulder there are small greyish-white, sharply-defined wheals, and linear wheals are readily produced by scratching the hyperæmic patches, but with more difficulty on those which are simply pigmented.

The child is of fair complexion, robust, and in perfect health apart from the affection of the skin. During the three months for which it has been under observation, the patches appear to have become on the whole less hyperæmic, without other appreciable change. The hyperæmia, however, is very variable; a patch which is bright red on one occasion may be pale buff on the next, and again red, either wholly or in part, on a subsequent visit. When the child cries or struggles, the redness is much increased.

The boy was born at the full time after a normal pregnancy and labour, and has had no illness with the exception of jaundice, which appeared soon after birth, and continued for a month. The mother states that the conjunctivæ were yellow, but the urine was pale and the stools of normal colour; it is therefore very probable that there was no true jaundice, but only the yellow discoloration of the skin which so frequently occurs in new-born infants.

The present eruption began on the back when the child was a fortnight old, as red flat patches on which "blisters" formed, and rapidly spread over the body until it reached its present development. The "blisters" appear to have been wheals as a general rule, but on one or two occasions vesicles or small bullæ were noticed, discharging a colourless fluid, and drying up into thin crusts; they were no doubt purely accidental. The wheals were always of short duration, lasting a few hours, and by no means constant in appearance, long intervals frequently elapsing without any; they have always been most common around the waist and neck, where the skin is most rubbed by the clothes. There has apparently been no itching throughout, except when the skin has been rubbed, as after washing; the mother has never noticed the child scratch at other times, nor has it done so on the numerous occasions when I have examined it.

Both parents are quite healthy; there have been no miscarriages, and no sign of syphilis in either. There is one other child, a healthy girl, aged three years, who has never had any skin affection.

This case is an example of a skin disease which has recently attracted much attention from its rarity and other

[1] A paper read, and patient shown, to the Harveian Society, April 1st, 1880.

peculiarities, and of which I have found ten cases recorded. The earliest occurred at the Skin Hospital, Blackfriars, and is reported by Mr. Nettleship (*Brit. Med. Journal*, vol. ii., 1869, p. 323), under the title "Chronic Urticaria leaving Brown Stains—nearly two years' duration." The disease seems then to have been overlooked or neglected till December, 1874, when cases were communicated to the Clinical Society by Mr. Morrant Baker (one case) and the late Dr. Tilbury Fox (three cases). Three more have since been brought before the same Society—two by Dr. Barlow, and one by Dr. Sangster. One was published last year (*Med. Times and Gazette*, vol. i., 1879, p. 116) by Dr. Goodhart, and in the *Archives of Dermatology*, vol. v., 1879, p. 26, there is a full account by Dr. Morrow of a case which first came under his observation in 1876. In addition to the case I have brought before the Society, I am acquainted with two others, as yet unpublished—one shown to the Hunterian Society on February 25th, 1880, by Dr. Stephen Mackenzie, and one under the care of Dr. Pye-Smith. They both present the same general characters.

There can, I think, be no doubt that the disease is a form of urticaria, if we are to take the presence of wheals, and especially factitious wheals, as pathognomonic. They have been noted in all the cases with the exception of those of the late Dr. Tilbury Fox, who does not mention them. Factitious urticaria, however, was not found by Dr. Goodhart, and in my own case wheals can hardly be said to form a prominent feature, being often absent for long periods. In other respects all the cases are very similar, being characterised by early onset (from ten days or earlier to six months after birth); by hyperæmia and pigmentation, with or without papular and nodular swelling; by good general health; and especially by long duration. Pruritus is nearly constant, but not invariable, being absent in two of Dr. Tilbury Fox's cases, only slight and occasional in Mr. Morrant Baker's, and only present in my own after mechanical irritation.

The disease does not appear to be connected with any diathesis, the large majority of the children and their parents being healthy; one case only (the first of Dr. Barlow's) came of a tubercular family. In Mr. Morrant Baker's case death occurred at the age of three years from empyema, but no tubercle was found post mortem. The affected skin in this case was examined by Dr. Thin, who came to the conclusion that the disease was allied to lupus. It is hardly possible to imagine anything more unlike lupus clinically; apart from the striking dissimilarity in course and aspect, none of the cases have ulcerated, or left scars after involution. Again, the disease is certainly most unlike xanthelasma, to which Dr. Tilbury Fox thought it was related. Its closest allies seem to be urticaria and erythema multiforme (especially the varieties E. tuberculatum and E. urticans), from which it chiefly differs in chronicity, and the entire absence of febrile or other disturbance of the general health. The name erythema permanens, proposed by Mr. Morrant Baker, will cover most of its characters, two of the most striking being expressed by Dr. Sangster's name, urticaria pigmentosa. Between erythema and urticaria, however, there are so many transitional forms, that the nomenclature of any one member of the group is a matter rather of convenience than importance.

With regard to causation there is not much to be said. Mr. Jonathan Hutchinson believes that the affection has its origin in the irritation caused by the bites of insects, fleas or bugs. This is not easy to prove; it has not been noticed by any observer, and, if it were common, it is difficult to account for the absence of punctures, scratch-marks, and small blood-scabs at any period of the cases; moreover scratching, when present, seems to have *followed*, not *preceded* the eruption. Jaundice, which is often accompanied by itching, is very doubtful as an antecedent. It is said to have occurred in Dr. Sangster's case before the child was a week old, and to have lasted a fortnight. The colour of the urine and fæces, however, is not stated, and I think it probable that (as in my own case) true jaundice was wanting. The characteristic eruption, moreover, did not appear until the child was two months old. The absence of jaundice has been specially noted in most of the other cases.

MEATH HOSPITAL, DUBLIN.—The prizes for the Winter Session 1879–80 have been awarded to the following:—Senior Surgical Prize: A. H. Murray. Junior Surgical Prize: John Melluis. First Medical Prize: E. E. Lennan. Second Medical Prize: Austin Cockle.

Correspondence.

"Audi alteram partem."

REPRESENTATION OF THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—Will you allow me to state why so many London University graduates of all shades of political opinion have promised to support Sir John Lubbock, in his candidature for their representation, and have passed by others who are members of the institution. The reason is because science, and therefore medicine, has such a small utterance in the House of Commons, whilst law has more than a hundred mouthpieces. Sir John Lubbock's devotion to science is well-known, and scientific medicine is therefore safe in his hands, as several Parliamentary debates have shown. To a medical man, therefore, *cæteris paribus*, the superior merits of Sir John Lubbock over the Master of the Rolls are obvious.

But, then, it is urged that our member should be a graduate of the University, and much weight is attached to the proposition that he will thereby bring to the House all the advantages of an intimate acquaintance with its principles and its interests. Now, in reference to these qualifications, it must be remembered that Sir John Lubbock has been more than a dozen years an active member of the Senate, and therefore in a position, than which none could be better, to give him a thorough knowledge of the whole working of the University.

If it, nevertheless, be affirmed that the University ought to be represented by one of its own graduates, such a proposition seems to be founded mostly on sentiment, for it must be remembered that the University of London, not being a centre of learning, fails to have that binding influence on its members as do the older universities. The graduates know nothing of one another, and the late election has clearly shown that a very large number of them are not imbued with the principles on which the foundation of the institution was laid. The want of common interest, too, has often been shown by the antagonism exerted between the different faculties. I think it not surprising, therefore, that medical graduates of various political opinions should sacrifice a mere sentiment for the sake of having so renowned a man as Sir John Lubbock to represent them as a scientific body.

I am, Sir, your obedient servant,

May 4th, 1880. SAMUEL WILKS.

To the Editor of THE LANCET.

SIR,—May a Conservative member of Convocation be allowed, on non-political grounds, to offer a remark upon the letter of Mr. Fowler, who was chairman of Mr. Charles's committee during the recent contest, and addressed to one of the secretaries of Sir George Jessel's committee? This letter has been issued as a circular to the Conservative graduates. The effect of it will probably be that some Conservatives may be induced to support Sir George Jessel in the belief that he is, in the opinion of the active members of their party, the most acceptable candidate. It should be understood that the Conservatives have taken no collective action in the present contest. Mr. Fowler has no authority to speak on their behalf. A very large proportion of the Conservative members of Convocation are graduates in medicine and science. Many, perhaps most of them, think there are lawyers enough in the House already; that we are lawyer-ridden enough; whilst the members fitted to represent science might be counted on one's fingers. Accordingly, lacking a Conservative candidate, their sympathies incline largely in favour of the claim of Sir John Lubbock, our Vice-Chancellor, who would carry into the House those qualities which enlist the confidence of the scientific world, and render him the most fitting representative of an academical constituency.

M.D. LOND.

May 5th, 1880.

TUMOURS OF THE CEREBELLUM.

To the Editor of THE LANCET.

SIR,—A paper by Dr. Stephen Mackenzie on the Diagnosis of Tumours of the Cerebellum, which has just appeared in your columns, contains, besides much which is useful and interesting, so many statements which are at variance with the conclusions hitherto arrived at with regard to this subject, that I cannot allow them to pass unchallenged. There is still so much confusion in our knowledge of intracranial tumours that a rigid criticism of the cases brought forward, and the opinions based thereon, seems imperatively required, and this must be my excuse for the following observations:—

I would say, then, that to my thinking not one of the three cases on which Dr. Mackenzie's paper is based can be utilised for the diagnosis of tumours of the cerebellum, since two of them are incomplete, and in the third extensive lesions existed at the same time in other structures.

In the first case, which is described as one of myxomatous glioma of the cerebellum, neither the pons and medulla, nor the spinal cord appear to have been examined; yet this should have been done, seeing that the symptoms which were present during life point strongly to disease in those parts. The retraction of the head and the tetanic seizures, which led Dr. Mackenzie to diagnose without hesitation tumour of the cerebellum, I should have referred to an irritative lesion of the medulla or the upper portion of the cord. *Tumour of the cerebellum alone never causes either of the symptoms mentioned by Dr. Mackenzie as appertaining to it.* In order to prove this assertion, I could mention a considerable number of well-observed cases, but will content myself with referring to those recorded by Ebstein ("Osteoma of the Cerebellum," in *Virchow's Archiv*, vol. xlix., p. 145), by Ferber ("Glio-sarcoma," in "Beiträge zur Symptomatologie," &c., Marburg, 1875), and by Bull ("Sarcoma," in *Philadelphia Med. Times*, May 15th, 1875).

The second of Dr. Mackenzie's cases, which is described as one of "solitary tubercle," is not one of disease localised in the cerebellum; for from his own description of the post-mortem changes, it appears that there was likewise a large tubercular mass in the left lateral ventricle, "projecting into it from about the situation of the corpus striatum." The condition of the pons is not mentioned, but the medulla was "so much flattened as to be almost riband-like." This case cannot therefore teach us anything about tumours of the cerebellum, as it clashes with *the first principle of localisation in cerebral disease*—viz., *that the lesion from the occurrence of which diagnostic conclusions are to be drawn must be limited in extent, and not affect important neighbouring structures, either by pressure or otherwise.*

In the third case, which was likewise one of tubercle, the condition of the pons, medulla, and cord does not appear to have been examined; only the "nerves of the medulla" are stated to have been healthy. Tubercle, however, is apt to be diffused, and may be suspected in the pons and medulla where convulsive or epileptiform seizures have taken place during life. Interesting as Dr. Mackenzie's cases, no doubt, are, as examples of intracranial tumours, they must, for the reasons I have just given, be looked upon as quite unsuited for serving as guides for the diagnosis of cerebellar disease.

I now proceed to notice the clinical remarks in Dr. Mackenzie's paper, and cannot help expressing my surprise that he should not have laid more stress upon the circumstance that *tumour of the cerebellum may exist without causing any symptoms at all.* Yet this is one of the best attested facts in cerebral localisation. Indeed, a whole cerebellar hemisphere may be diseased, and yet there may not be a single morbid sign to draw attention to such a condition. Symptoms appear to occur only when the *middle lobe* is affected, while disease in the lateral lobes is often impossible to recognise on this account.

Amongst the chief symptoms of cerebellar tumour, Dr. Mackenzie mentions:—

1. *The reeling gait;* and this constitutes unquestionably the most important sign of the disease. I cannot, however, agree with him in saying that it differs entirely from the walk in locomotor ataxy. The walk in the two affections is generally very similar, and in some cases it is impossible to draw a distinction. In connexion with this it is important to know that cerebellar ataxy is almost invariably confined to the legs and the body, and does not affect the movements of the arms and hands, even in cases where the legs are so unsteady that the patient cannot make a single step without falling. Such a state of things is exceptional in posterior spinal sclerosis, and therefore furnishes valuable indications.

2. *Tonic convulsions* are, according to Dr. Mackenzie, of the greatest importance as distinctive of cerebellar disease; indeed, he sees the strongest reason for believing that tetanus is an affection of the cerebellum! This statement I must absolutely contradict. On analysing the cases in which tumours occurred in the cerebellum *only*, it is found that any form of motor irritation, whether it be tremor, clonic or tonic convulsion, did either not occur at all, or that, if it existed, it could be traced to more or less severe pressure by the tumour on the pons and medulla. In direct opposition to Dr. Mackenzie, I therefore maintain that tonic convulsions and other signs of motor irritation speak *against* rather than *for* disease localised in the cerebellum.

3. Dr. Mackenzie states that *movements of the eyeballs* are frequently connected with cerebellar tumours; but cases recorded by other observers show that such movements do not occur in disease of the cerebellum itself, but only in irritative lesions of the crura cerebelli ad pontem.

4. *Enlargement of the head*, which Dr. Mackenzie considers a sign of the greatest value for cerebellar tumours, appears to me to be quite devoid of importance. It does not occur in adults who are subject to such tumours, and is seen in children in a variety of other intracranial diseases. It therefore cannot teach us anything at all definite about the cerebellum.

Singularly enough, one of the commonest symptoms of cerebellar tumour, and one which ranks in importance next to the reeling gait, has been quite overlooked by Dr. Mackenzie: I mean a peculiar form of vertigo. It is distinguished from vertigo dependent upon other cerebral lesions by being extremely severe, and sometimes permanent; and that it is not the consequence of the cerebellar ataxy, is shown by the fact that it occurs in some cases before a reeling gait is noticed, and also while the patient is in the recumbent position. It is, however, always more marked when he sits up in bed or attempts to walk. It gets worse on closing the eyes, and better by supporting the patient. The sensation experienced is either one as if all external things were moving and spinning round, or as if the body itself were constantly on the move. As vertigo occurs likewise in disease of the semicircular canals, a stomacho læso, &c., it is on that account no reliable sign of a cerebellar tumour if present alone; but when it is observed simultaneously with cerebellar ataxy, it becomes of the utmost importance, more especially as it is characteristic of tumour, and does not occur with atrophy, hæmorrhage, softening, and other diseases of the cerebellum. All other symptoms which are sometimes ascribed to cerebellar tumour, such as vomiting, occipital headache, optic neuritis, &c., are unreliable; the only safe guides for our diagnosis of these cases being cerebellar ataxy and cerebellar vertigo.

I am, Sir, your obedient servant,

JULIUS ALTHAUS, M.D.

Bryanston-street, Marble-arch, April 17th, 1880.

MR. BADCOCK'S EXPERIMENTS ON THE VARIOLISATION OF KINE.

To the Editor of THE LANCET.

SIR,—While admitting the general cogency of Mr. Richardson's letter on this subject, I can only regard his allusions to the analogy of the vegetable world as showing his failure to apprehend the grave difficulties presented to the biologist by the facts with which he deals. It would, no doubt, be surprising if, by a careful selection of soil, we succeeded in producing cucumber from radish, but not so the raising of a plant differing as widely from radish as a case of vaccinia from one of small-pox. With our new plant, however, we might safely predict the reappearance of the parent features on reverting to the original conditions of production; and that Mr. Badcock's vaccine lymph should behave otherwise is one of those facts which seem to stand isolated and incredible to all but eye-witnesses until analogies have been discovered linking them with the world of personal experience. "The fact is," as Mr. Richardson remarks, "vaccine is a disease *sui generis*," and, being so, I fail to see that the history of its derivation from small-pox

throws any light whatever on the problem, Why does vaccination prevent the small-pox? or confirms in any degree the value of Jenner's discovery, or places the protective power of vaccine on any surer basis. The facts of such derivation and such prevention seem equally wonderful, and not mutually explanatory.

Mr. Richardson's letter establishes the value of Mr. Badcock's stock of lymph, which he preferred to all others, but affords no proof that that discovered by Jenner remained unimpaired, "after passing through the constitutions of 2500 persons," for since the publication in your columns in the summer of 1872 of a paper by the late Dr. J. B. Barbour (then Medical Superintendent of the Stockwell Fever Hospital, temporarily devoted to small-pox), proving the worthlessness of lymph taken from revaccinations, I cannot accept as conclusive on this point the production of a good vesicle, but consider that reliance can only be placed on the evidence derivable, decade after decade, from carefully-compiled statistics, such as have been hitherto non-existent. To the importance of Dr. Barbour's paper you, Sir, directed attention in a special article; and as I, in my capacity of assistant medical officer, gleaned most of the facts on which his argument was founded, I think it right, in referring to it, to say how thoroughly, in my opinion, these facts bore out his conclusions.

I am, Sir, yours truly,

WILLIAM M'LAURIN, M.B., C.M. Glas.

Islington, April 11th, 1880.

CHIAN TURPENTINE IN CANCER.

To the Editor of THE LANCET.

SIR,—I am somewhat surprised that Professor Clay's communication in THE LANCET of March 27th, "On the Treatment of Cancer of the Female Generative Organs" by Chian turpentine, has evoked no reply; and in the absence of remarks from any abler pen than mine, I feel constrained to draw the attention of your readers to what I consider very serious inconsistencies in the professor's report of his cases.

Case 1 is described as "scirrhous cancer of the cervix and body of the uterus. The uterus was so extensively destroyed by the cancerous ulceration that its cavity readily admitted three fingers. On the fourth day of treatment the os was quite contracted, and would now scarcely admit the finger."

It would be interesting to know how this marvellous contraction was brought about in four days, especially as Professor Clay thinks that the remedy acts by "dissolving all the cancer cells, leaving the vessels to become subsequently atrophied." Surely, if this is the supposed action of the drug, we should expect, as a first consequence of the treatment, that the cancerous ulcerated cavity would be enlarged, not contracted. In such extensive cancerous ulceration as is described in this case, we naturally assume an invasion by the disease of at least the fibro-myomatous elements of the cervix, which tissues we fairly assume to have atrophied and disappeared. Yet we are expected to believe that they still exist, and exist in full vigour; and, what is more incredible, we are asked to believe that in the marvellously short period of four days they cause the os to contract, so that it will scarcely admit the finger, where, only those four short days before, three fingers were readily inserted.

In the second case "the os and cervix were enlarged from carcinoma (?) to the size of a hen's egg. The os was dilated, and the cavity of the cervix was filled with epithelial (?) growths, which bled freely on examination. Sacral pain was very severe, and hæmorrhage had been continuous for six weeks."

On the seventh day of treatment there was "increased white discharge, the os was patulous, and its surface was studded with flabby shot-like eminences." In the absence of any report of such important symptoms as hardness of the enlarged cervix; fixation, which would surely have been present if the cervix had reached the size of a hen's egg; and fetid watery discharge (of which no mention is made in any of the four cases), I am led to conclude that this case was one of granular disease, with some hyperplasia of the cervix, especially when we read that on the seventh day there was increased white discharge, with flabby shot-like eminences.

The terms in which the report of the fourth case is concluded I consider most unsatisfactory; thus: "Under this treatment the woman very rapidly improved, the pains entirely ceased, and the parts became much reduced in size and more movable. The patient felt quite well. She is very active, cheerful, and happy, and may be pronounced convalescent."

No mention is made of the appearance of the parts after the cancerous mass had disappeared.

Unless complete cicatrisation had taken place I should not consider the patient convalescent; but we are left in the dark on this as on many other points in these cases of alleged cures of alleged cases of cancer.

In an all-important subject as the present, I venture to assert that those cases which are reported as cases of cancer will not bear the scrutiny of pathology; and if cases of cancer they were, the most important clinical features of cancer of the uterus have been omitted.

I am, Sir, yours faithfully,

Bath. F. K. GREEN, F.R.C.S.

To the Editor of THE LANCET.

SIR,—In your issue of the 1st inst. is a letter from Dr. Rich. F. Battye on the Treatment of Cancer by Chian Turpentine. Either from some defect in my own understanding, or from a slight want of perspicuity in the writer, a good part of this communication is with some little difficulty and doubt comprehended by me. This much, however, I think I can make out: Firstly, that Dr. Battye wishes people to draw the inference that it is the silica of the Chian turpentine that does the good. Secondly, he recommends Strasburg turpentine as a substitute for Chian turpentine, on account of the large proportion of silica it contains, and as being more procurable.

As regards the first, I would only say that as Chian turpentine, according to Professor Rodgers' analysis, only contains about three-fourths of a grain of silica in a hundred grains of turpentine, to suppose that it were the active ingredient would require an amount of faith, not to say credulity, in the therapeutic efficacy of silica which, Dr. Battye's article on silica to the contrary notwithstanding, I should say, is possessed by no one but himself.

As regards the second, that if Dr. Battye had carefully read Professor Clay's communication (*vide* LANCET, March 27th, p. 479) he would have seen that he says—"The oil of turpentine, if it produces any effect on cancer, is inadmissible on account of the speedy production of its specific effects even when administered in small doses. The same remark applies, with less force, to the Venice and Strasburg turpentines; in my hands they have not produced the same beneficial effects on cancerous growths as Chian turpentine has done."

I therefore sincerely hope that no one will be deluded by Dr. Battye's representations into giving Strasburg instead of Chian turpentine. *A priori* it would appear to me improbable that Strasburg turpentine, grown in the centre of the continent of Europe, in latitude 47°, should be therapeutically substitutible for Chian turpentine, grown in an island in the centre of the Mediterranean, in latitude 35°.

Believe me, Sir, yours obediently,

Blackpool, May 5th, 1880. WM. HARDMAN.

AXILLARY BROMIDROSIS OF LONG STANDING CURED BY THE APPLICATION OF OLEATE OF MERCURY.

To the Editor of THE LANCET.

SIR,—In the early months of last year, through the medium of THE LANCET, I asked if some of your readers would kindly suggest some remedy for this distressing complaint, and I was favoured with replies containing various suggestions as to treatment, some of which had already been tried, while others remained to be carried out, but all eventually with a negative result. Thinking that perhaps those gentlemen who so kindly replied would like to hear the sequel of the case, I venture to publish its history.

C. M., aged twenty, tall, well made, of fair complexion, and with an excellent family history, came under my care in October, 1878. For two years prior to seeing him he had suffered from profuse sweating in both axillæ, always fetid,

but more so towards evening. The secretion is so abundant that after the slightest exertion it penetrates through to his coat, while the remaining parts of the body are barely, if at all, damp. Examination with a strong lens does not show any unusual appearance of the skin, nor does the microscope detect any abnormality in the hair of the parts. The odour is that of oleic acid intensified, and can easily be detected at some yards from the patient. He has tried all sorts of deodorizers and perfumes, paid a visit to more than one specialist, has tried all sorts of nostrums, and finally is getting quite hopeless of obtaining even partial relief. Starting with the theory that my patient's digestive system must be faulty somewhere, although I could not point to a single symptom that indicated anything wrong, I prescribed the mineral acids in bitter infusions, next I tried alkalies, then German waters, and lastly Fowler's solution of arsenic. Combined with this internal treatment I applied locally carbolic acid in glycerine, extract of belladonna, tannin dissolved in spirits of wine, tincture of iodine, until the skin got sore, and finding all these remedies of no use I looked up Hebra. From him I learned that if I applied an ointment composed of emp. plumbi, dissolved in oil, according to certain directions, I should, like that experienced dermatologist, find that remedy "invariably successful;" but, like many other infallible nostrums, it proved useless. Just then, when the patient had been nearly twelve months under continuous treatment, I was using some 10 per cent. oleate of mercury solution for the cure of ringworm, and, as a last resource, I determined to give it a trial. After carefully sponging the parts with absolute alcohol, for the purpose of removing the moisture, I painted them with the oleate, and this I continued every night for a week until considerable irritation of the surface was produced. It was then discontinued, and I am happy to say that since that time (now nearly six months), although there still remains a considerable amount of perspiration on exertion, there is no smell whatever attending it, and the patient considers himself cured. Which is the curative agent, the oleic acid or the mercury? Probably both, the oleic acid by its penetrating properties reached the sebaceous glands, carrying with it the mercury, which then exerted its alterative properties.

Your obedient servant,

New Cross. WILLIAM BULL, F.R.C.S.

MEDICAL EDUCATION.

To the Editor of THE LANCET.

SIR,—As a Liberal ministry is now in power it is reasonable to suppose that home legislation will occupy a large share of its attention during the forthcoming session of Parliament. The medical profession ought to well consider the working of all Acts relating to itself, and to agree upon the reforms needed in each case—for reforms there will certainly be, either with or without the general sanction of its members.

From a student's standpoint, I believe nothing more urgently demands reform than the present system of medical education. It throws unwarrantable difficulties in the way of the medical student without adequately assisting him in the acquisition of a knowledge of his future profession; it leads to a great waste of his time; and lastly, it is unnecessarily expensive. To venture even to doubt the value of lectures as a means of education will appear in the eyes of some to be almost sacrilegious. I may, however, honestly say that I cannot at the present time recall a single fact of which I have obtained a knowledge from this source, and yet I am proud to have been included amongst the classes of some of the ablest professors of our day. In making this statement I do not wish to cast a word of disparagement against the lecturers themselves, whose discourses were mostly models of perspicuity and eloquence. My experience in this respect may be singular, but I fancy that it is a common one. In my student days I regarded the time occupied in a compulsory attendance upon hospital lectures as so many good working hours wasted, and I still so regard it. Routine lectures were instituted when text-books and periodicals were scarce, expensive, and inaccurate. Then doubtlessly they had their use; but *nous avons changé tout cela*, and with this reform the necessity for their existence has ceased. Again, the exacting requirements of hospital attendance scarcely fulfil the purpose usually assigned them—namely, to act as a practical introduction to clinical work. Anyone can estimate the value of this system by attaching himself for an hour to the peripatetic *queue* of any popular member of the staff of a large hospital as he makes his circuit of the wards. A few specially favoured students may possibly hear and appreciate the observations and so forth of the great professional luminary, but to the great majority of his followers the whole procession is a farce as far as educational work is concerned: and it mostly degenerates into a conversational lounge. The system which persists in treating young men as boys, irresponsible beings, who are to be made to learn their profession "willy nilly," cannot be an enduring one. When we send a young man into the world we accredit him with sufficient *nous* to know his own interests, until we find him unworthy of our trust. The profession, if not already shielded from the results of misplaced confidence in ingenuous youth, would be speedily so protected by increasing the scope, the frequency, and the thoroughness (not necessarily the difficulty) of the present pass examinations. If the present system of medical education was replaced by a private tutorial system, supplemented of course by facilities for real work in our great hospitals, the medical student would assuredly gain in self-reliance, in professional acquirements, and in a pecuniary sense by a diminution of the hospital fees.

I am, Sir, yours obediently,

Brighton, April 29th, 1880. W. A. HOLLIS.

NEW MODE OF PERFORMING THE OPERATION OF EXCISION OF THE KNEE-JOINT.

To the Editor of THE LANCET.

SIR,—Mr. G. A. Wright, in your issue of April 17th, refers to the unsatisfactory result which, in a considerable proportion of cases, follows excision of the knee-joint, and suggests what he believes to be a new mode of performing the operation. I fully agree with him in his preliminary remark, and I should be very sorry to see once more the operation as freely adopted as it was a few years ago.

The operation he recommends is not new, although original on his part; and, considering the inconvenience and loss of power which arise from the division of the extensor tendon, and the absolute needlessness of this division, I am surprised that the idea of leaving it has not more generally suggested itself to operating surgeons.

On August 29th, 1876, I read, before the East Kent district of the South-Eastern Branch, a paper, entitled "On Excision of the Knee-joint, together with the Description of a New Mode of Performing the Operation." In this paper I reported eight cases, four of which were by the new method; seven made complete recoveries, and could walk or run about with strong, useful limbs, and perfectly-healed wounds. Those operated on by the new method got well quicker, and obtained earlier and freer movement than the others. Photographs were shown of the successful cases. The following is extracted from the minutes of the meeting:—

"Mr. Treves then described a new mode of operating, and which he considered might fairly be called his own. The object of the operation was to leave the tissues in front of the joint uninjured, to preserve the natural covering of the joint, and to keep intact the extensor tendon with its attachments. In the first place, he makes a crescentic incision about three inches in length on each side of the joint, the lowest point being thoroughly dependent for the exist of pus or serum; he then divides the lateral ligaments and reflects the tissues till synovial cavity is well opened, then passes a wide director behind the joint in front of posterior ligament, and with a narrow bistoury divides the crucial ligaments and any adhesions; he then inserts a metal retractor in front of the bones to secure the tissues from injury whilst the bones are sawn, which he performs with a Butcher's saw from behind (introducing the blade of the saw, and connecting it with the frame afterwards); he leaves the patella if healthy, or if the cartilage be ulcerated saws off a slice. He considers the advantages of the operation to be many:—1. Improvement in the appearance of the limb. 2. Greatly increased power of extension. 3. Extensor tendon being left intact in front and posterior ligament behind, the bones are not so loose, and the tibia is less

likely to get displaced. 4. The operation partakes somewhat of the character of a subcutaneous one, and the bones consequently unite more kindly and readily. 5. The operation after a little practice is an easy one."

I have quoted the minutes exactly as they were entered by the secretary at the time, and the paper was, I believe, afterwards published, but I have forgotten the date.

One objection I have heard made to this operation is that the operator is unable to see and judge of the condition of the sawn surfaces; a little consideration will show that the skin taken off is on its sawn surface an exact counterpart of the surface left behind, and I have found that by well washing this I could form a far better idea of the condition of the bones than by a rough look at the bleeding surfaces. Langenbeck preserved the extensor tendon by turning the bones out at the side. I have tried this operation, but found it rough and clumsy, involving considerable violence to the soft parts.

The cause of failure in excision of the knee is that sufficient immobility is not maintained between the sawn surfaces, and the chief feature in securing success is not the mode of operating, but the dressing. I published an article on this subject in THE LANCET, 1871. I shall be happy to lend Mr. Wright the photographs if he would like to see them, but the tissues having been left in front, the deformity is so imperceptible that they will be liable to convey the doubt whether they are photographs of excisions at all.

I am, Sir, your obedient servant,

WM. KNIGHT TREVES, F.R.C.S.

Margate, April 20th, 1880.

COMPLETE RETROVERSION OF THE GRAVID UTERUS IN FOURTH MONTH, CAUSING PARALYSIS OF THE BLADDER.

To the Editor of THE LANCET.

SIR,—The following case, which lately occurred in my practice, may be deemed worthy of publication:—

I was summoned on Tuesday, Dec. 2nd, 1879, to Mrs. R——. She had been suffering for some days from pain in the abdomen and back. The bowels, habitually confined, had not been relieved since the previous Saturday. Sickness occurred for the first time that morning, and continued to the time of visit. Urine passed with difficulty and in small quantities, after frequent efforts. Countenance anxious; tongue moist and slightly furred; pulse 80; temperature normal. She was still suckling her fourth child, aged fourteen months. The catamenia, which appeared regularly during lactation, had been absent since the end of August, and she thought she was again pregnant. The abdomen was enlarged and contained a tumour reaching above the umbilicus, having, at first impression, the characteristics of the gravid uterus at the ninth month.

On making a vaginal examination I could not at first discern the position of the uterus, the lower portion of the pelvic cavity being occupied by a large collection of fæces in the rectum. After the administration of a simple enema, I was enabled to discover that the uterus, which was enlarged to about the third month, was completely retroverted—the fundus being situated posteriorly beneath the promontory of the sacrum, pressing upon the rectum and the cervix, forwards and upwards, towards the neck of the bladder. I immediately proceeded to empty the bladder, and having with difficulty, owing to the pressure of the cervix, introduced a soft india-rubber catheter (a gum elastic failing to pass), removed seven and a half pints of turbid urine, with immediate relief to the urgent symptoms. My efforts to replace the uterus failed completely, and I left her, having ordered a simple aperient and light farinaceous food.

On visiting her the following day I found her in much the same condition, no action of the bowels or relief from the bladder. She had slept well, and was free from pain; appetite good; tongue moist and clean; pulse 72. I again took away about four pints of clear urine, and administered an enema with slight effect. Attempts to alter the position of the uterus were again unsuccessful.

On Dec. 4th there had been very scanty action of the bowels since the previous visit, and she had passed about half a pint of urine, but the bladder was full, and the catheter again brought away about three pints. She was free from pain or sickness, had slept well, and enjoyed her food. The cervix was somewhat lower, and not now pressing on the urethra, showing that retention was due to paralysis from the previous distension. I ordered her a mixture containing nux vomica, and again fruitlessly endeavoured to alter the displacement.

Her condition had not much changed on the 5th. There had been a slight alvine discharge, and about four ounces of urine passed. The catheter was again introduced, displacement still existing. To continue medicine, and have a dose of castor oil.

On the 6th she felt much better. The oil had acted freely. The bladder had been twice relieved, and contained, on introduction of catheter, only a pint. The uterus was in the same position, resisting all efforts at replacement. To continue the medicine.

Urine and fæces passed freely on the 7th, and no further unpleasant symptoms appeared. Uterus unchanged.

Violent bearing-down pains commenced on the 8th, continuing at short intervals during the whole day. Bowels moved, and urine passed abundantly. The efforts to reduce the uterus were futile. A grain of opium every fourth hour was ordered.

The pain continued on the following day, but without any dilatation of the os, and the patient had symptoms of exhaustion, showing the necessity of immediate action. I determined therefore to produce abortion by passing a bougie into the uterus, and rupturing the membranes; but before proceeding to do so I resolved to make a final attempt at reduction, and with that object, got her in the semi-prone position across the bed. With two fingers of the left hand in the rectum, I drew the fundus downwards and to the left, and, with a finger of the other hand in the vagina, I pressed the cervix upwards and to the right, with the object of bringing the uterus into the oblique diameter of the pelvis. After pressure exerted in that way for a few minutes, the uterus suddenly slipped out of its position in the hollow of the sacrum. I ordered her to keep persistently in the prone position, and to continue the opium.

On the 10th, I found the patient as I had left her on the previous day. The pain ceased immediately on reduction of the displacement, and had not returned—urine constantly passing from her in the bed—bladder empty. I now introduced a large Hodge's pessary. The opium to be continued.

Symptoms of cystitis, with acid urine, tinged with blood, supervened on the 11th. To have an alkaline mixture, in addition to the opium, and a dose of castor oil at night. The next day she had improved in every respect; the urine was clear, and passed without pain or straining, bowels well moved; and on the 13th she was extremely free from pain or discomfort, and said she felt quite well. The opium was discontinued, and the pessary was ordered to be retained until quickening ensued, after which it was removed.

I am, Sir, your obedient servant,

Horncastle, 1880. JOHN HADDEN, M.D.

TREATMENT OF RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I trust you will kindly allow me to make a few remarks, in answer to the letter of Dr. Prideaux, published in your issue of the 10th April.

With regard to there being no fatal cases under the use of salicylic acid, I can refer to several in THE LANCET during the last six months, one fatal on the sixth day. Dr. Sinclair, whose communication I noticed in your paper, was certainly not enamoured with salicylic acid, when tried on his own person.

The tendency of late years has been to treat diseases on rational principles, whereas if only one remedy is to be used in each disease, the practice of medicine would be reduced to mere empiricism. That system can only be pursued when testing the efficacy of any particular drug.

My experience of iodide of potassium in acute rheumatism is that it is a safe and certain remedy, if given in large doses, and as the pain of rheumatism is caused by the deposit of lymph in the tissues attacked, it can be speedily removed by the action of this drug on the absorbents. I usually also give opium at night to procure sleep, and apply mustard at the commencement, particularly in acute articular rheumatism, and have seen many cases cured by its use alone at the outset, without taking any medicine.

I have frequently cured acute rheumatism in the wrists

and elbows in my own person by applying a few leeches, and without medicine. The pain ceased in twenty-four hours, and I could use the limbs on the second day.

An average of eighteen days for the cure of rheumatism (if acute) I consider by no means a favourable result (*vide* Dr. Prideaux's letter).

What called forth my remarks was that I had long felt surprise that iodide of potassium had fallen into disuse in England for rheumatism. Counter-irritation can scarcely be considered a barbarous remedy, as mankind all over the world have experienced its benefits, and at the present time it is practised in some shape all over the habitable globe.

I am, Sir, your obedient servant,

Pulbeck, April 12th, 1880. GEORGE K. BARTON, M.D.

NEW STEAM ANTISEPTIC SPRAY PRODUCER.

To the Editor of THE LANCET.

SIR,—The accompanying illustration represents a new form of inexpensive steam antiseptic spray producer, invented by Mr. Benham, connected with this hospital, and by whose name the apparatus is known. It is composed wholly of metal, and is provided with an excellent safety-valve, and a glass gauge for ascertaining the contents of the boiler. The handle is also of a very convenient form, and can be held for a considerable time without tiring the hand. The apparatus is constructed to produce an uninterrupted spray for upwards of an hour and a half.

Having already effected numerous successful operations on the antiseptic method with the aid of these sprays, I am able to recommend them to the profession with every confidence. They are both inexpensive and portable, and are well-adapted for operations or dressings for hospital and private practice. Their low price should place them within the reach of every country practitioner. They are manufactured by C. Wright and Co., New Bond-street, London.

I am, Sir, yours obediently,

JAMES ROUSE, F.R.C.S. Eng.

St. George's Hospital, April 20th, 1880.

DISLOCATION OF THE ASTRAGALUS.

To the Editor of THE LANCET.

SIR,—In your issue of April 17th a case of the above-named accident is reported by Mr. Gore, of Bath. The following notes may be acceptable:—

On the afternoon of June 13th, 1879, J. W——, a young man aged about twenty-six, a plumber, while working on the roof of a hall slipped over the parapet, and having hung by his hands till he was exhausted, fell to the ground, a distance of nearly thirty feet. He was taken up unconscious, and after a time was brought home to Doncaster. I saw him about six o'clock the same evening. I found the following injuries:—The right tibia and fibula were broken across about six inches from the lower end. There was a small wound at the seat of injury, from which blood freely oozed; the left foot was greatly distorted, and resembled a severe case of talipes varus. There was a great projection on the onter side of the front of the foot, over which the skin was very tightly stretched; and a cavity could be distinctly felt between the os calcis and the bones of the leg. The astragalus was dislocated forwards and outwards, and the pain which he suffered from it was far more intense than from the fracture of the other leg.

Dr. Sykes having kindly administered chloroform I proceeded as follows:—The left knee being held firm, I extended the foot as much as possible, at the same time pressing it well backwards, so as to expose the upper surface of the os calcis. With a little manipulation I got the astragalus back on to it with an audible snap. Still keeping up the extension I got the foot back into its place entire. With this method there was not much difficulty in effecting reduction. I then put up the fracture of the right leg. The case did very well. There has since been no stiffness of the left foot.

I have not met with any mention of this method of reduction of dislocation of the astragalus, and the ease with which it was effected was not the least noticeable part of the case.

I am, Sir, yours, &c.,

F. ROYSTON FAIRBANK, M.D.

Hall-gate, Doncaster, April, 1880.

AMALGAMATED FRIENDLY SOCIETIES; THEIR USE AND ABUSE.

To the Editor of THE LANCET.

SIR,—Having held the appointment—such as it is—of surgeon to a medical institute for several years, allow me, as Manse Headrigg would say, to "lift up my testimony" against the *abuse* of the same as practised very extensively in the town where I chance to reside.

The duties are, of course, most laborious, and frequently the calls are unseasonable and peremptory; moreover, a great many of the members are in such a position pecuniarily that they ought to feel ashamed to pay their medical attendant the beggarly fees they do.

Ex. gratia. One of my institute patients has an income of certainly not less than seven hundred per annum, and he, poor fellow, pays one shilling a quarter for attendance and medicines for his family, a shilling a quarter for his wife, and the same amount for himself, making a noble doctor's bill of twelve shillings per an., all told!

Now, this case is by no means an exceptional one, and fully convinces me practically that to all such bodies "Friendly Societies" is quite a misnomer. The friendship is *far too one-sided*, and unless proper restrictions are made and enforced, it simply means benefiting one class of men at the expense of another, or "robbing Peter to pay Paul." I am, Sir, yours, &c.,

May 5th, 1880. A MEDICAL VICTIM.

P.S.—Having struck on this rock myself, I would earnestly warn all young medical men from being lured into connexion with amalgamated Friendly Societies as a stepping-stone to practice; they are very two-edged affairs, and by touching pitch we are apt to get defiled.

RELIGIOUS LIBERTY AND KING'S COLLEGE.

To the Editor of THE LANCET.

SIR,—Dr. Sandwith's letter ought not to be the last word upon this subject so long as it is matter of common knowledge that the religious test at King's College is only of partial application. The profession and the world have a right to ask upon what principle and by whose authority some of the medical staff have not been called upon to sign a declaration that they are members of the English Church while others apparently are so called upon. This is only one more instance of the suicidal policy pursued by the Council of King's College. It has before the present occasion lost them the services of some of the most distinguished members of the profession. Persistence in it will most certainly afford them many more opportunities of exhibiting those Christian virtues peculiar to their institution, and of turning again their tingling cheeks to the hand of the smiter. It is said that the successful candidate for the post of ophthalmic surgeon was the only applicant. The lesson is an easy one, and if the Council of King's College cannot learn it, so much the worse for them and King's College, which on many grounds is becoming a bye-word and a reproach among the hospitals of England.—I am, Sir, yours, &c.,

QUÆ NON RELIGIO?

EDINBURGH.

CASES of hydrophobia are not at all common north of the Tweed; however, of late a few have been reported, chiefly from the west coast of Scotland. The latest occurred in the person of a strong healthy man, from the village of Alexandria, who was admitted to the Royal Infirmary, Glasgow, on Monday, April 19th. He stated that he had been bitten by a dog in the month of December last. He did not appear to suffer particularly, but presented the characteristic well-marked spasms on attempting to drink any fluids. This condition continued till Thursday night (22nd April), when the patient's state resembled that of a person with delirium tremens. On Friday morning he died. What renders the case more interesting is that in January a man hailing from the same town, and who had been bitten about the same time, came into the hospital and died of hydrophobia. The treatment adopted in these cases consisted mainly in the hypodermic injection of pilocarpine.

In the annual report of the Royal Infirmary one is struck by the very great number of osteotomies that have been performed. These have been chiefly carried out by Dr. Macewen, who has now done the operation more than two hundred times. The mortality may be regarded as *nil*, since the deaths (about three in number) were due purely to extraneous causes. Dr. Macewen, when operating, makes use of his own special method, employing a wedge-shaped chisel; removes no bone, and remedies all the angular deformities which are met with in any patient, whether due to knock-knee or rickets, at one "sitting," so to speak. Rigid Listerian precautions are adopted, and but one dressing, that at the time of the operation, is usually required.

Dr. Hector Cameron has removed from the elbow-joint of a patient five loose cartilages.

It is stated that the present hospital accommodation in Glasgow is not sufficient to meet the demand, and that before long it will be necessary to enlarge the existing infirmaries and to throw open more wards.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates of the College on April 29th:—

Robert Greenoak Bailey, Public Dispensary, Leeds.
Richard Atherstone Billiald, Kington, Herefordshire.
Henry Howard Bovill, James-street, Buckingham-gate.
Erasmus Bush, New Thornton Heath, Croydon.
Herbert Paton Butler, Lambeth Infirmary.
Wayland Charles Chaffey, Cedars-road.
Samuel Macmillan Chalmor, Bolton.
Wm. Thomas Marston Clark, Cross Deep, Twickenham.
Thomas Vincent Dickinson, Sloane-street.
Alfred Napier Godby Gibbs, Clifton, Bristol.
John Hartley, Middlesex Hospital.
Sydney Haviland Henty, Camden-road.
Henry Hine, Nottingham.
Edward Wilmot Holland, York-road.
John Robert Kemp, Richmond, Surrey.
William Henry Pepler, St. Bartholomew's Hospital.
Charles Joseph Plummer, Wilton-terrace.
Beaven Neave Rake, Guy's Hospital.
Charles Renner, M.D. Würzburg, Harley-street.
Henry Robert Spackman, Percy-circus.
F. Caney Stevenson, M.B. Toronto, Castletown, Isle of Man.
William Henry Wheeler, King Edward's-road.
Henry George Gastrill Wilkins, Ealing.
W. Daniel Campbell Williams, Gower-street.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at Meetings of the Board of Examiners on April 29th and 30th and May 3rd and 4th:—

William D. Halliburton, John E. Penn, F. G. Penrose, H. Downes, Edward A. Dingley, George V. Perez, A. J. Stiles, H. P. Birch, W. V. Sloane, and Francis A. Stokes, University College; St. John O. Randa, Maurice P. Jones, Alfred Searle, Arthur T. F. Brown, George H. Graham, Charles E. Beebe, R. W. Brogden, G. Kendall, Thomas Carr, W. T. F. Davies, S. Worthington, and A. E. C. Woodhouse, Guy's Hospital; Hugh Rayner, Arthur R. Backham, Frede. Stroyan, F. J. Pates, T. G. C. Evans, Stanley S. Howland, Druce J. Slater, Arthur J. Williams, Frank Broadbent, A. H. Roberts, H. W. Hunt, A. Maude, E. R. Williams, E. W. Roughton, E. Wilcox, Geo. H. Vos, James R. Payne, W. Overend, and A. Shadwell, St. Bartholomew's Hospital; Hugh St. D. Griffiths, R. P. N. Samuel, R. N. Fenner, Edwin C. Tatam, Herbert W. S. Verity, W. F. Lace, C. J. W. Tatham, E. B. Townsend, and Robt. H. Russell, King's College; Chas. H. Wise, Westminster Hospital; E. C. Maynard and Francis E. Marston, St. Thomas's Hospital; W. R. Tytheridge, Henry U. Bromley, R. H. S. Spicer, P. P. Whitcombe, and Henry S. Turner, St. Mary's Hospital; Geo. Locke, Charing-cross Hospital; E. Corner, Edinburgh and King's College; R. E. Rouse, St. Thomas's Hospital; G. H. Fink, University College.

Of the 154 candidates examined during the past and present week, 43 failed to satisfy the Board of Examiners, and were referred for three, and 3 candidates for six, months' further anatomical and physiological study.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 29th:—

Bejauji Pestonji, Bombay.
William Rees Williams, Cambridge-street.

At the Preliminary Examination in Arts held at the Hall on April 23rd and 24th, the following gentleman was amongst the candidates who passed in the second class:—

George Saunders Clarke.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on April 29th:—

F. Henry Alderson, M.R.C.S., L.S.A., L.M., Hammersmith.
John Bride, M.R.C.S., L.S.A., Wilmslow, Cheshire.
J. Hunt Condon, M.R.C.S.L., L.M., Cawnpore, India.
Richd. Thos. Lyons, M.R.C.S., Rue St. Honoré, Paris.
J. Dixon Mann, L.R.C.P.E., M.R.C.S., Manchester.
Harry May, L.R.C.P.L., M.R.C.S., L.S.A., Ware, Herts.
James Murray, L.R.C.P.E., M.R.C.S., London.
Robt. Essay Threadgale, L.R.C.P. Ed., L.F.P.S.G., L.S.A., Upper Norwood.
John Charles Whishaw, M.R.C.S.L., Earl's-court.
Richard Wood, L.R.C.P.L. & Ed., M.R.C.S., L.S.A., Bromsgrove.

UNIVERSITY OF ABERDEEN.—The following candidates received degrees in Medicine and Surgery on the 30th ult.:—

DEGREE OF M.D.

James Allan, M.B., C.M., New Wandsworth, London.
Algernon Dutton Bromehley, M.B., C.M., Camberwell.
William Ford Edgelow, M.B., C.M., Torquay.
Hebor Dowling Ellis, M.B., C.M., Eastbourne.
William Henry, M.B., C.M., Dunfermline.
John MacMunn, M.B., C.M., Long Eaton.
Adam Frederic John Mickle, M.B., C.M., Grantham.
Robert Milne, M.B., C.M., Cluny.
Leonard Rudd, M.B., C.M., Upper Norwood.
William John Ritchie Simpson, M.B., C.M., Dover.
Francis William Smith, M.B., C.M., Westbury.
William Abraham Walker, M.B., C.M., Chesterfield.
William Robert White, M.B., C.M., Southampton.
William Herbert Williamson, M.B., C.M., Aberdeen.
Julius J. Eardley Wilmott, M.B., C.M., Weston-super-Mare.

DEGREE OF M.B.

James Aymer, Laurencekirk.
William Beddie, M.A., Strichen.
Harry Arthur Benham, Bristol.
Alexander Boswell, London.
William Hampden Brodie, Aberdeen.
Algernon Aaron Cohen, Clarence River, New South Wales.
William Deans, Kintore.
Alexander Downie Diack, Aberdeen.
* John Durno, M.A., Fyvie.
James Grant Fleming, Grantown.
John Glaister, Wooler, Northumberland.
George Henry Harvey, Colchester.
* Fife Jamieson, M.A., Aberdeen.
* Joshua Law Kerr, Crawshawbooth, Manchester.
Herman, John Liebstein, Highbury, London.
Adam Corbet Lyon, Peterculter
Coll Reginald Macdonald, Argyleshire.
† Alexander Milne, M.A., Minthaw.
Satish Chandra Mukhopadhyáy, Calcutta.
Alexander Augustus William P. Murison, Macduff.
Arthur Lodge Patch, Madras.
Peter Rough, M.A., Daviot.
Thomas Alexander Sellar, Llanbryd, Morayshire.
Robert Soutar, Kirriemuir.
Alexander James Struthers, Aberdeen.
Charles Henry Welford, Sunderland.
Percy Roberts Wilde, Weston-super-Mare.
Christopher St. John Wright, Priors Marston.

DEGREE OF C.M.

James Aymer.	Adam Corbet Lyon.
William Beddie.	Coll Reginald Macdonald.
Harry Arthur Benham.	† Alexander Milne.
Wm. Hampden Brodie.	Satish C. Mukhopadhyáy.
William Deans.	Alex. A. W. P. Murison.
Alex. Downie Diack.	Arthur Lodge Patch.
* John Durno.	Peter Rough.
Jas. Grant Fleming.	Thos. Alex. Sellar.
John Glaister.	Robert Soutar.
Geo. Henry Harvey.	Alex. James Struthers.
* Fife Jamieson.	Chas. Henry Welford.
* Joshua Law Kerr.	Percy Roberts Wilde.
Herman John Liebstein.	Christopher St. John Wright.

* Honourable Distinction.
† Highest Academical Honours.

At the same time the following gentlemen were certified as having passed all the examinations, but did not graduate:—

William Carnegie Brown. | Alfred Ireland.

After the capping, Principal Pirie, in the name of the Senatus, presented Mr. Duncan Jas. Reid with the Shepherd Memorial Prize.

SURGEON W. CONGREVE SANDYS has been appointed to the *Hecla*.

THE salary of Dr. Edward Fitzgerald, medical officer of Mallow Workhouse, has been increased by £20 a year.

WE understand that Dr. Robert McDonnell, F.R.S., will succeed the late Mr. Stapleton as visiting-surgeon to the Jervis-street Hospital, Dublin.

A. W. REID, M.A., M.B., of Arnold, Basford Union, Notts., has received the Government Extra Grants for successful vaccination in his district—£18 17s. (second time).

THE corner-stone of a new infirmary at Bolton was laid on the 1st inst. The number of beds provided will be 75. The sum of £32,600 has been paid or promised towards the erection and endowment of the building.

DR. J. EMERSON REYNOLDS, Professor of Chemistry in the University of Dublin, has been recommended by the Council of the Royal Society for election as a Fellow in consequence of his discoveries in chemical science.

WILLIAM LE GROS DENZILOE, M.D., has been placed on the Commission of the Peace for the borough of Bridport; Samuel Gourley, M.D., for the county of Durham, John William Teale, F.R.C.S. Eng., for the borough of Scarborough; and Arthur Edward Turnour, M.D., for the county of Denbigh.

BATH MINERAL WATER HOSPITAL.—The annual court of governors of this institution was held on the 1st inst., at the hospital, Major Allen, the president, in the chair. The report showed that during the past year 854 patients had been admitted, being more than any former year; that the daily average in the hospital was 124, and the stay 53 days. The cost of each occupied bed had been £40 0s. 7d., including all the expenses of the hospital. The financial condition of the institution was reported to be satisfactory, there remaining a balance in hand of £13,230.

THE VENTNOR CONSUMPTION HOSPITAL.—On the 30th ult. the biennial dinner was held at Willis's Rooms, in aid of this hospital, which was founded in 1868 by Dr. Hassall. There was an influential company of ladies and gentlemen. In proposing the principal toast of the evening the chairman, Lord Rosebery, referred to the distinctive features of this hospital. Last year the mortality was reduced to only 2½ per cent., by restricting the admission of cases to those to whom benefit would accrue by treatment while in the incipient stage of consumption. The maintenance of the institution costs nearly £7000 a year, and only £1000 was invested. During the evening subscriptions, &c., including a donation of fifty guineas from the chairman, were announced by the secretary, Mr. Ernest Morgan.

LYING-IN HOSPITAL, NEWCASTLE-ON-TYNE.—At the annual meeting of this charity, held last month, the report of the medical officers showed that 38 cases had been attended in the institution itself and 484 cases at their own houses, and with the most gratifying result that no death had occurred in the 522 cases. It is little more than a year ago since the committee decided to abolish entirely the practice of midwives in connexion with the hospital, and place all cases under the care of the visiting surgeons, or of such senior students of the Newcastle College of Medicine as the surgeons might appoint to act under their own personal supervision. It has also been the effort of the committee only to admit *into* the hospital such patients as were actually destitute and in need of charity, so as to avoid the overcrowding of a building which is somewhat antiquated and not quite in accordance with the more modern views of the hospital accommodation necessary for parturient women. We may congratulate the subscribers that by these medical and hygienic means not only has the charity become more popular among the poor, and the number of cases nearly doubled, but also the dangers of child-bed among their patients have been considerably reduced.

THE ROYAL COLLEGE OF VETERINARY SURGEONS.—The annual meeting of the College was held on Monday in the Freemasons' Hall, Principal Williams in the chair. The report stated that on the passing of the supplemental charter granted by Her Majesty's Government in August last 124 persons had availed themselves of the opportunity offered, and had received the diploma of the Royal College of Veterinary Surgeons. It had been suggested that steps should now be taken by the College to obtain an Act of Parliament for the protection of the title of veterinary surgeon or other titles conferred by them or empowered by royal charter. The report was adopted.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—On last Tuesday the following examiners were elected for the ensuing year:—For Letters Testimonial and Fellowship: Henry Gray Croly, William Fraser, Benjamin G. MacDowel, Edward Stamer O'Grady, B. Wills Richardson, Edward Stoker, Robert Swan, William Thomson. For Diploma in Midwifery: John J. Cranny, Henry Croly, William Smyly. Examiners in General Education: Frank James Davys, Michael Joseph Malone, Robert Morton. All the outgoing examiners were re-elected, and in addition Mr. Cranny, who has been elected in the vacancy caused by the retirement of Mr. Kirkpatrick, who as a Fellow of the College of Physicians in Ireland was ineligible for re-election.

BEQUESTS TO MEDICAL CHARITIES.—Mr. Thomas Wrigley of Timberhurst bequeathed £10,000 each to the Owens College, Manchester, the Bury Dispensary and Hospital, the General Hospital and Dispensary for Sick Children at Pendlebury, Manchester, and the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties at Lancaster. Sir Isaac Morley of Beechfield, Doncaster, bequeathed 100 guineas to the Doncaster Infirmary, and 19 guineas each to the Sick Society and the Lying-in Society at Doncaster. The Goldsmiths' Company have given £100 to the Westminster Hospital. Mr. William H. Poynder has given £100 to the Charing-cross Hospital. The Buckinghamshire General Infirmary has received £100 from the Royal Charity Fund upon the recommendation of Lord Beaconsfield. The Norfolk and Norwich Hospital has received £100 under the will of Mr. James Chapman, and £100 under that of Mrs. Anne Woodhouse. Lord Overstone has given 50 guineas, and Messrs. Drummond £25, to the Charing-cross Hospital.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ATKINSON, R., B.A., F.R.C.S., has been appointed Junior Assistant Medical Officer at the Worcester County and City Lunatic Asylum.

BLACKER, E. J. L., M.D., M.R.C.S.E., has been appointed Medical Officer to the B District of the Thrapston Union.

BLACKMAN, J. G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Portsea District of the Portsea Island Union.

BOSTOCK, A. S., M.R.C.S.E., L.S.A.L., has been appointed Honorary Medical Officer to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary.

BOYD, P. C., L.R.C.P., L.R.C.S.E., &c., has been elected Assistant Medical Officer to the Bethnal-green Workhouse and Infirmary, vice Johnson, resigned.

BUCKELL, E. H., L.R.C.P.L., M.R.C.S.E., has been appointed Honorary Medical Officer to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary.

CHAFFEY, W. C., M.R.C.S.E., L.R.C.P., has been appointed House-Surgeon to the Victoria Hospital for Children, vice Tarleton.

CHISHOLM, W., M.D., L.R.C.S.Ed., has been appointed Medical Officer to the Harworth District of the Darlington Union.

CURTIS, J. G., F.R.C.S.I., has been appointed Surgeon to the Cork South Infirmary and County Hospital.

DAVIES, J. W., L.R.C.P.I., has been appointed Medical Officer of the Clun District of the Clun Union.

DE WOLFE, G. H. B., M.D., has been appointed Honorary Physician to the Sheffield Public Hospital for Diseases of the Skin.

HARTLE, Mr. C. H., has been appointed, temporarily, Assistant Medical Officer at the Infirmary of the Greenwich Union, vice Boyd.

HERB, R. G., M.D., has been appointed Pathologist and Curator to the Museum of the Westminster Hospital, vice J. K. Fowler, M.R.

LAWTON, J. W., M.R.C.S.E., has been appointed House-Surgeon to the London Hospital, vice J. G. Clark, whose appointment has expired.

MACAULAY, J. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Ninth District of the Honiton Union.

MACKINTOSH, A., M.D., L.F.P.S.G., has been reappointed Medical Officer of Health for the Chesterfield Union, for three years. £5 5s. per annum.

MICHEL, H. S., M.R.C.S.E., L.S.A.L., has been appointed to the Second or Whitford District of the Holywell Union.

NEILL, C., M.D., has been appointed a Honorary Physician to the Ryde Dispensary.

NICHOLSON, W., M.D., C.M., has been reappointed Medical Officer for the Central District of the Greenwich Union.

NORTH, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Llangorse District of the Brecknock Union.

OLIVER, J., M.B., has been appointed Resident Physician to the Queen's Hospital, Birmingham.

PETTINGER, G. W., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Stretford Urban Sanitary District. £50 per annum.

POLLARD, W., F.R.C.S., has been appointed Honorary Consulting Surgeon to the Torbay Hospital, Torquay.

PRICE, A., M.R.C.S.E., L.S.A.L., has been appointed Surgeon to the Royal South London Dispensary, vice Dukes, resigned.

RYERSON, G. S., M.D., has been appointed Lecturer on Ophthalmology in Trinity Medical School, Toronto, Canada.

SKAIFE, F., L.R.C.P.Ed., has been appointed Honorary Medical Officer to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary.

SMYTH, S., M.R.C.S.E., has been appointed House-Surgeon to the Westminster Hospital, vice G. H. Butler, M.R.C.S.E., resigned.

SPENCER, H. E., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed to the Second District of the York Union.

STRANG, W. J., M.B., has been appointed Resident Medical Officer to the Newcastle-on-Tyne Dispensary, vice J. A. Monteith, M.B., resigned.

SWALE, H., M.R.C.S.E., has been appointed Resident Medical Officer to the French Hospital, vice G. D. Maddick, M.R.C.S.E., resigned.

TANNER, W. K., M.D., F.R.C.S.I., has been appointed Consulting Surgeon to the Cork South Infirmary and County Hospital.

TAYLOR, Mr. G., has been appointed Junior House-Surgeon to the General Hospital, Cheltenham, vice Mr. W. Shaw, resigned.

VON BEVERHOUDT, W. T. H., M.R.C.S.E., has been appointed Medical Officer to the Sutton-upon-Derwent District of the Pocklington Union.

WHITLEY, F. G. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for St. Agnes District of the Truro Union.

WILLIAMS, J., F.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Merthyr Cynog District of the Brecknock Union.

WOMERSLEY, J. K., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Bungay District of the Wangford Union, vice E. B. Adams, M.R.C.S.E., deceased.

Births, Marriages, and Deaths.

BIRTHS.

CHESSALL.—On the 22nd ult., at Horley, the wife of William Chessall, M.D., of a son.

COGHILL.—On the 30th ult., at St. Catherine's House, Ventnor, Isle of Wight, the wife of P. G. Sinclair Coghill, M.D., F.R.C.P.Ed., of a son.

HEWLETT.—On the 5th inst., the wife of John C. Hewlett, of The Ferns, Hornsey, Middlesex, and Cree Church-lane, London, of a daughter.

LEONARD.—On the 27th ult., at Loraine-road, London, N., the wife of H. J. Leonard, M.B., of a son.

MCDONALD.—On February 26th, at Hamilton, Tasmania, the wife of Wallis McDonald, M.R.C.S.E., of a daughter.

RUTHERFORD.—On the 25th ult., at 60, Church-street, Shipley, near Leeds, the wife of John James Rutherford, L.R.C.P.Ed. &c., of a daughter.

SANDERSON.—On the 4th inst., at Fairfield, Penrith, Lily, wife of Thomas Drummond Sanderson, M.B., F.R.C.S.E., of a daughter.

SETON.—On the 27th ult., at Thurloe-place, S.W., the wife of D. Elphinstone Seton, M.D., of a son.

MARRIAGES.

BARCLAY—MOUNT.—On the 1st inst., at St. Michael and All Angels', North Kensington, William Mackenzie Barclay, M.D., of Grantown, Inverness-shire, to Winifred Maud, fourth daughter of George Mount, Esq., of Wellington-road, St. John's-wood.

DUNCAN—GALT.—On the 29th ult., at St. Andrew's Church, Southport, by the Rev. Thomas Kagar, M.A., Rector of Ashton-under-Lyne (uncle of the bride), assisted by the Rev. Prebendary Crass, M.A., Vicar of St. Andrew's, James Duncan, M.B., of Ashton-under-Lyne, to Maria, younger daughter of the late John Galt, F.R.C.S.E.

EBERLE—HOBSON.—On the 1st inst., by licence, at Hornby Church, near Bedale, Yorks, John James Eberle, Physician, of the Medical College, Easingwold, Yorks, to Lucy Elizabeth, elder daughter of Joseph Hobson, of the same town.

LORD—SKINNER.—On the 28th ult., at St. Peter's, Eaton-square, Frederick Lord, L.R.C.P.Ed., L.R.C.S.Ed., to Eliza (Lily), youngest daughter of the late Henry Skinner, of Tiverton, Devon.

DEATHS.

CASKIE.—On the 20th ult., at Stewarton, Ayrshire, John Caskie, Surgeon, aged 83.

DENNEHY.—On the 27th ult., at Clonmel, co. Tipperary, Cornelius Dennehy, L.A.H.D., aged 67.

FOSTER.—On the 26th ult., at Eastlake-road, Brixton, John Frederick Foster, M.D., F.R.C.S., late of Hartley Wintney, Hants, and Guernsey, in his 71st year.

MABERLY.—On the 23rd ult., at his residence, Minford-gardens, West Kensington-park, William Henry Maberly, M.D., F.R.C.S., aged 77, deeply regretted.

MCCLOSKEY.—On the 27th ult., at Strabane, co. Tyrone, Joseph R. McCloskey, M.D.

.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

ARROWSMITH, J. W., Bristol.
Bristol Royal Infirmary Reports. Edited by Dr. W. H. Spencer & Mr. J. G. Smith.

BAILLIÈRE ET FILS, Paris.
Du Traitement de la Pneumonie Aiguë. Par le Dr. V. Hanot.
Les Pneumonies Chroniques. Par le Dr. J. Regimbeau.
Des Troubles Oculaires dans les Maladies de l'Encéphale. Par le Dr. A. Robin.
Des Paralysies dans les Maladies Aiguës. Par le Dr. L. Landouzy.
Accidents de la Lithiasie Biliaire. Par le Dr. A. Mosse.
Recherches Cliniques et Expérimentales sur le Bruit Moulin. Par le Dr. P. Reynier.
Des Divers Modes de Terminaison des Grossesses Extra-Utérines. Par le Dr. B. Deschamps.
Des Gangrènes Spontanées. Par le Dr. E. Rondot.
Des Sueurs Morbides. Par M. L. Bouveret.

BAILLIÈRE, TINDALL, & COX, London.
How to Feed an Infant. By Dr. Benson Baker.

BOGUE, DAVID, London.
Tracheotomy in Laryngeal Diphtheria. By R. W. Parker.

HODDER & STOUGHTON, London.
The Human Body and its Functions. By Dr. H. S. Paterson.

LIPPINCOTT, J. B., & Co.
Surgery in the Pennsylvanian Hospital. By Dr. T. G. Morton and Dr. W. Hunt.

LONGMANS, GREEN, & CO., London.
Heat a Mode of Motion. By John Tyndall, F.R.S.
Dr. Rigby's Letters from France &c. in 1789. Edited by his Daughter, Lady Eastlake.
Six Lectures on the History of German Thought. By Karl Hillebrand.
Climate and Medical Topography of British India. By Dr. P. N. Macnamara.

MACMILLAN & CO., London.
Nature Series: Degeneration. By Dr. E. Ray Lancaster.
The Care of the Insane and their Legal Control. By Dr. J. C. Bucknill.
A Handbook to the Public Picture Galleries of Europe. By Kate Thompson.

MORRIS, J., Paternoster-row.
The New Nation. By J. Morris. Five vols.

PUTNAM'S SONS, New York.
Lectures on the Human Eye. By Dr. Adolf Alt.

STANFORD, E., Charing-cross.
The Cobham Journals. With Introduction &c. by Eleanor A. Ormerod, F.M.S.

TAYLOR & FRANCIS, London.
The London University Calendar for 1880.

THE NEW SYDENHAM SOCIETY, London.
On Diseases of the Skin. By F. Hebra, M.D., and M. Kaposi, M.D. Translated and Edited by Waren Tay, F.R.C.S.
Atlas of Illustrations of Pathology. Fasc. II.
Lexicon of Medicine and the Allied Sciences. Part III.

TRÜBNER & CO., London.
The Pathology and Treatment of Venereal Diseases. By Dr. F. J. Bumstead. Fourth Edition. Revised by Dr. R. W. Taylor.
Rocky Mountain Health Resorts. By Dr. C. Denison.
Carlsbad and its Natural Healing Agents. By Dr. J. Kraus.

Aspiration of the Knee-joint. By Dr. H. O. Marcy.—Annual Report of the Veterinary Department of the Privy Council Office for 1879.—The Monthly Homœopathic Review.—Sunday Magazine for May.—Good Words for May.—Deutsches Archiv für Klinische Medicin.—La Crónica Médica.—Revue des Sciences Médicales. (Masson, Paris.)—Domestic Scavenging in Towns by the Pail and Ashtub Systems, as in use at Rochdale. By Sir A. Power, K.C.B. (T. Richards.)—Report of the Local Government Board.—Journal of Anatomy and Physiology. Vol. XIV. (Macmillan.)—American Journal of the Medical Sciences. (H. C. Lea's Son & Co.)—An Improved Method of Treating Depressed Fractures of the Nasal Bones. By Dr. L. D. Mason.—Bristol, Past and Present. (Arrowsmith, Bristol.)—The Pathology of Starvation. By Surgeon-Major Carran.—Inhalation of Oxygen in Disease. By E. L. Armbrecht. (Armbrecht & Co.)—Small-pox and Vaccination. By Dr. W. T. Iliff.—Dextral Valvular Disease of the Heart. By Dr. A. Morison. (Maclachlan & Stewart.)—Vierteljahresschrift für Dermatologie und Syphilis.—Monthly Review of Dental Surgery.—To Oberammergau and Back. By E. McQ. Gray.—The Medicine and Surgery of Homer. By Dr. H. Dunbar.—Archiv für Augenheilkunde. Annals of the Anatomical and Surgical Society of Brooklyn.—Boston University Year-book.—Sixth Report of the West Kent Sanitary District. (Knight & Co.)—Ethylization. By Dr. R. J. Levis.—The Problems of Insanity. By Dr. G. M. Beard.—Medical Students' Register.—The Magazine of Art, Part XXV.—The Family Physician, Part IV. (Cassell & Co.)—Brain, Part IX. (Macmillan.)—Neurological Contributions. By Dr. W. Hammond. (Putnam's Sons.)—Popular Science Monthly. (Appleton & Co.)—The Bar, Solicitors, and the Public. By J. P. Godfrey. (Evison & Bridge.)—Fraser's Magazine for May. (Longmans.)—Time for May.—Social Notes.—Monthly Review of Dental Surgery.—Transactions of the Odontological Society.—The Churchman for May.—Archives of Laryngology. (Putnam's Sons, New York.)—Alcohol, its Functions and Place. By Dr. T. R. Fraser. (Douglas, Edinburgh.)—Healthy Homes. By Dr. W. Newman. (Jenkinson, Stamford.)—English Poor Law. Charity and Poor Law. By J. J. Coulton.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 6th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 30	30·43	N.E.	48	45	91	59	39	..	Cloudy
May 1	30·32	N.E.	46	43	94	65	35	..	Fine
,, 2	29·85	S.E.	56	50	98	65	33	..	Hazy
,, 3	29·74	N.E.	45	43	82	66	37	..	Overcast
,, 4	29·97	N.E.	50	47	83	56	42	0·08	Cloudy
,, 5	30·03	N.E.	47	45	..	51	44	..	Cloudy
,, 6	30·03	N.E.	44	43	84	54	43	..	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

ANTI-VACCINATORS IN BRIGHTON.

ONE of the guardians of the Brighton Union, an anti-vaccinator, visited the public vaccination station in High-street a few days ago during the time when vaccinations were in progress, and is alleged to have conducted himself there in a manner offensive to the public vaccinator. The Board of Guardians, on complaint of the public vaccinator, took up the question at their next meeting, and, in a resolution unanimously carried, warmly censured their colleague for his conduct.

Medicus.—We think the claim unreasonable.

LODGMENT OF FOREIGN BODIES IN THE INTERIOR OF THE EYE.

To the Editor of THE LANCET.

SIR,—A reference in THE LANCET of April 3rd to a case published by Mr. Chisolm, of Boston, in which a foreign body had remained lodged in the eye for twenty-three years, and also the letter of Dr. Jacob in your issue of April 24th, induce me to mention two cases recorded by myself in the Royal London Ophthalmic Hospital Reports, vol. ix., part iii.

In one of these cases a piece of steel, becoming encapsuled in the interior of an eye, remained imbedded in the ciliary processes for twenty-nine years without producing sympathetic irritation in its fellow, but for the last nine years was at intervals the seat of excruciating pain, and was chiefly for this reason enucleated.

The other case, and, as far as I know, a unique one, was where a piece of metal was imbedded in the retina close to the optic disc, and from the first was distinctly visible with the ophthalmoscope, and yet permitted perfect vision. Eighteen months after the accident, when the patient was last seen, he was unconscious of any difference in the visual powers of the two organs, and read J. 1 fluently. An engraving appears in the Royal Ophthalmic Hospital Reports, depicting the situation of the piece of metal. I am, Sir, yours faithfully,

SIMEON SNELL,
Ophthalmic Surgeon to the Sheffield General Infirmary.

Sheffield, April, 1880.

To the Editor of THE LANCET.

SIR,—In your issue of April 24th, Dr. Jacob records a case of a foreign body remaining in the eye for nineteen years. On the 10th of this month I removed from the ball of the left eye a thorn, measuring five-eighths of an inch in length. The patient was an old man, who had six years ago received a blow in the eye from a thorn-bush. He was treated at the time for the consequent inflammation, and since then has been suffering much pain in the temple, with total loss of vision. He is now quite free from pain, and seems likely to recover in a slight degree some sight. I am, Sir, yours faithfully,

Ranisktllen, April 27th, 1880. J. S. GUNNING, L.R.C.P., &c.

COMPULSORY REGISTRATION OF INFECTIOUS DISEASES.

THE Public Health Committee of the Corporation of Dublin, in reply to a suggestion made to them recently, as to the compulsory registration of infectious diseases, that the head of the family be the informant, have adopted the following resolution:—"The Committee approve and recognise the necessity of an efficient system of registration of infectious diseases, and will be prepared to support any effort to secure the same, but pronounce no opinion at present as to the particular method best adapted to secure the desired result."

G. C. P.—Dr. E. B. Shuldham has published a work on the subject.

WHOOPING-COUGH: THE DISEASE DUE TO A FUNGOUS GROWTH; REMEDIES.

To the Editor of THE LANCET.

SIR,—As there seems to be an unusually large number of cases of whooping-cough among children in and around London, there is likely to be a revived discussion as to the efficacy of the different modes of treatment. A most interesting addition to the discovery of Dr. Letzerich, of Germany, has been made by an eminent scientific investigator in America, Dr. Henry A. Mott, Ph.D., &c., of New York. Dr. Letzerich began his investigations in 1871, and by microscopic examination of the mucus whooped up during the first or catarrhal stage, he discovered the presence of small, elliptically-shaped, brownish-red fungous spores, some of which had germinated and produced mycelium. Dr. Letzerich made a number of experiments on rabbits to prove the truth of his theory, introducing the fungous spores into the trachea of young rabbits by tracheotomy. In a short time they recovered from the operation, and then were affected with a cough exactly like whooping-cough. Their expectorations were the same as those of children, and, when killed, their lungs were found to contain fungus.

Dr. Mott, as an independent investigator, has already established a reputation second to none in the United States, and his study of the causes of whooping-cough cannot fail to be of great value. He found the fungous spores discovered by Letzerich, but not of the brownish-red colour. The ripe spores of whooping-cough differ from those of diphtheria in not being circular, and in not showing any finger-like protuberances. The growth of the mycelium in the masses of phlegm goes on very rapidly, and the threads acquire considerable length, especially when the disease is at its height. The expectorated mucus is also very thick at this stage, and on drying becomes of a glassy appearance, although very tenacious. In the latter stages there is a quantity of mycelium, and a rapid formation of spores takes place. If the fresh spores are treated with iodine and concentrated sulphuric acid, the colour of the mycelium becomes a beautiful blue; while the spores, normally white, then become brown.

As a remedy for whooping-cough, Dr. Mott strongly recommends the use of quinine. He does not profess to be the first to employ it, but he is probably the first to apply it as a direct consequence of the fungoid character of the disease. It should be taken in the powder form, and allowed to dissolve on the tongue; but, as children may find it difficult to do this on account of the bitterness of the drug, Dr. Mott recommends dissolving it in sugar-and-water, and giving the mixture by the spoonful. The best time to give it is just after a coughing spell, and before going to sleep at night. The size of the dose depends upon the age of the patient and the severity of the attack. To a grown person from three to five grains may be given, and allowed to dissolve on the tongue. To a child from two to five grains may be dissolved in two ounces of sugar-and-water, and one teaspoonful given at a time. Quinine administered in capsules or in sugar-coated pills would be of no use whatever. Your obedient servant,

Herne-hill-road, Brixton, April, 1880. J. L. STICKNEY.

Mr. John Jackson.—The Collegial-triennial prize has not been awarded for twenty-two years past—viz., 1858, when Mr. George Harley obtained it. It has been awarded to the following members of the College only, all of whom are deceased:—Mr. Swan in 1822 and 1825, Mr. Williams in 1840, Mr. H. Coote in 1843, Mr. Gray in 1846, and with a special honorarium the same year to Mr. A. Poland.

Mrs. Haycroft had better make known her want by means of an advertisement.

SOCIAL SCIENCE IN AUSTRALIA.

THE programme of the Health Section of the Social Science Congress lately held in Melbourne included the following subjects:—

1. The construction and ventilation of houses, hospitals, schools, factories, public buildings, theatres, churches, prisons, &c., in relation to health. 2. The disposal of noxious gases in mines and manufactories. 3. Drainage: of the soil of town-sites; of dwellings, and of buildings of all kinds. 4. Water: collection and storage; construction of wells, tanks, and reservoirs; the prevention of the pollution of rivers, streams, &c.; the filtration, purification, and distribution of water. 5. Cleanliness: the removal and disposal of filth, night-soil, and all kinds of refuse. 6. Food and drink: including the use and abuse of stimulants; adulteration, &c. 7. Contagious diseases: the prevention of their origin and their spread; disinfection; isolation; contagious diseases hospitals; disinfecting establishments for clothing, bedding, &c.; disinfecting vehicles; quarantine. 8. The registration of disease. 9. Poisons: in food and drink, clothing gases, wall-papers, &c. 10. Recreation. 11. The keeping and killing of animals for food.

DIETETICS.

PROFESSOR M'KENDRICK, of Glasgow, is giving a popular course of lectures on Food, Digestion, and Nutrition in Inverness. It may be useful to cite the professor's estimate of the daily quantity and kind of nutriment required by a healthy man. The lecturer pointed out that the typical diet was 4½ oz. albuminates, 3 oz. fat, 14 starch, and 1 salts—altogether about 23 oz. of dry food, with from 70 to 80 oz. of water. A man who performed hard work—say a labouring man—required 6 oz. albuminates, 4 oz. fat, 17 starch, 1·3 salts—altogether about 28 oz. of dry food, with from 70 to 90 oz. of water.

Sacul would do wisely to put himself in direct communication with the Secretary to the Commissioners in Lunacy.

Mr. W. Longtry might consult Tilbury Fox's work on Skin Diseases.

"BONE-SETTING" AT THE CLINICAL SOCIETY OF LONDON.

To the Editor of THE LANCET.

SIR,—"A countryman, aged fifty, dislocated his shoulder. The dislocation was at once reduced, and the arm bandaged to the side. Nine weeks afterwards he came to London for advice. It was found that the limb was so stiff that he could not move the elbow more than two or three inches in any direction, and any movement, whether on his part or during examination, produced great suffering."

This case, with other three somewhat similar, formed a text for a very interesting debate at the meeting of the Clinical Society of London on the 9th ultimo, introduced and led by Mr. Howard Marsh, who showed how successfully such cases may be treated, the joint set at liberty, and the pain arrested, by placing the patient under an anæsthetic, and then putting the joint in a series of short jerks through all its natural range of movement, numerous adhesions around the joint being felt to give way.

Mr. Marsh and the subsequent speakers referred to the frequency with which such cases fall into the hands of "bone-setters," and it would almost seem that the chief object sought in the debate was to prove to country surgeons that their metropolitan brethren understand, and can cure, such conditions of the joints if only they are sent up to them; indeed the President is reported to have said exactly this.

Now, with all due respect to those heads of our profession, I humbly submit that there is another and most practical and important lesson deducible from such cases, and one wholly and entirely left out of consideration in the discussion referred to, and that is (prevention being better than cure), How may such stiffness of joints following their luxation be prevented? The writer of this letter has reason to fear that there has been, and is a serious defect in the written and oral teaching of our schools in this respect. It is generally taught, and commonly practised, that after reduction of a luxation the limb must be kept firmly fixed and at rest with splints and bandages for two or three weeks. Now, if this *only* be done, a stiff joint must result; for seeing that laceration of the synovial membrane, rupture of the capsular ligament, stretching or tearing of other ligaments *must* take place when a joint is dislocated, and effusion of blood and its fibrine *probably* does, what is more likely to happen, if the limb is fixed in one position, than that the fibrous tissue around the joint should be so consolidated, so shortened, and so agglomerated as to prevent motion of the joint when it is attempted in a few weeks' time? Observing that such results happened often, and made much work for the bone-setters, the present writer early adopted the theory and practice which he has for upwards of a quarter of a century diligently taught his pupils—viz., that the *reduction* of a dislocation is almost the least important part of its treatment; the *immediate, daily, and free* employment of passive motion, to the full extent of its normal capabilities, being as necessary to a successful restoration of the joint as the reduction. Of course, after each exercise of the joint it is placed at rest, with strict limitation of its movements until the next day, when the passive exercise is repeated. The result has in every instance fully justified the practice, and the writer has been often surprised to observe the small amount of pain attending the manipulations when begun early, and conducted gently and carefully. The question still remains, how far this practice is warrantable in cases of fracture near to or into a joint, and of fracture with dislocation. Of course displacement of the fragments is most carefully to be avoided; but, inflammation being absent, it would seem better to secure the integrity of the joint by early and gentle movement than to spend all our thought and care on a union which, after all, nature is almost sure to effect if but a reasonable amount of rest and adaptation of the fragments be maintained.

Your obedient servant,

Rugeley, May, 1880. D. H. MORCHISON, M.D., F.R.C.S.

ECZEMA.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent "M.R.C.S.," in your last impression, permit me to state that within the last twelve months two cases such as he describes have come under my observation, and both have yielded to the following treatment, although they had previously proved intractable:—First, the affected part was painted over with pure carbolic acid; as soon as this became dry, collodion was similarly applied. This was repeated every fifth day. At the same time solution of arsenic was administered three times daily.

Yours faithfully,

Liverpool, May, 1880. W. H. LAMBARD, M.D.

HERPES CIRCINATUS.

MR. H. E. CAUTY, Surgeon to St. George's Hospital for Diseases of the Skin, Liverpool, writes as follows:—

Several articles have lately appeared in your columns in reference to herpes. Without entering into the question as to whether the symptoms and appearances described amounted in some of the cases to more than eczema, the following case may perhaps merit, from its rarity, record in your pages. The varieties of herpes which depend on the locality attacked are numerous. I had some time ago a case of zoster, in which the whole mucous surface of the mouth, tongue, fauces, &c., as far as could be seen, was so thickly studded with vesicles that an ordinary pin's-head could not have been placed on a free spot; but the varieties which take a definite form are very rare. The ordinary term of herpes circinatus is merely vesicular ringworm, in which the vesicle is accidental, very transparent, irregular in size and shape, not accompanied or surmounting a swollen inflamed base, nor producing any bleeding when ruptured.

A. L——, aged twenty-six, married, had six children, and now six months pregnant, presented herself at the hospital, complaining of a rash on her arms. On looking at these forearms, solitary patches, the size of a shilling, are noticed surrounding a varied extent of red, inflamed skin, and separated from this inflammation by a border of broken segments of circles of herpetic eruption, with inflamed, swollen base, and a vesicle more or less perfect on the swelling. Some of the solitary patches are just one vesicle; others are a perfect circle, the size of a shilling, whilst one just exceeds a florin in size. Some of the vesicles have been broken and scratched, and there are several points where there has been bleeding. The patient has had a similar attack twice before in the same locality, and when not pregnant. She describes the spread of the eruption as always beginning from a point or centre, and then spreading from the circumference quite evenly until the patches coalesce to form the gyrate border. She has had the present eruption six weeks. There is very little on the back of the left forearm; none on the right. The whole extent covered on the left arm is about three inches square, extending more nearly to the wrist than on the right; but on this latter there is one large patch beautifully defined, extending 5 in. by 3 in., the centre being pale, gradually deepening in colour as the edges are approached. The vesicles contain opalescent or semi-purulent lymph, varying from nearly clear to very yellow. General health fair; countenance pallid; pulse 78, full; irritation moderate, but at times severe; some burning pain; sleeps badly; bowels regular; urine plentiful and clear. She was ordered to dust the parts with a powder of starch, zinc, and lycopodium, and to take some acetate of ammonia and potash. At the end of a fortnight the large patch was clear; but the burning pain still continuing severe in some of the smaller rings, a lotion of sulphate of zinc and gum was directed to be kept continually applied. In another fortnight she was well, the whole attack having lasted a little more than ten weeks, the previous attacks never having lasted more than one week.

I merely wish this case to be recorded. It is too rare to draw any inference as to a neurotic theory or the reverse, nor was there anything special in the treatment, nor, except in the entire absence of any constitutional disturbance, anything remarkable in the general features.

Practising Physician.—Bergeron, we believe, has advocated the use of hydrofluoric acid, evaporated in the proportion of a gramme to each cubic metre of air in the sick-room, and thus inhaled by the diphtheritic patient.

Dr. J. B. Cameron.—We think our correspondent acted rightly, and see nothing in the course he took that should give offence to J. F. and and W. B. G. if fully explained.

Mr. D. G. Kennedy.—We do not know.

SUPRA-PUBIC PUNCTURE OF THE BLADDER.

To the Editor of THE LANCET.

SIR,—My attention has just been drawn to Mr. Teevan's lecture in THE LANCET for April 17th, in which he recommends supra-pubic puncture for impassable obstruction as preferable to tapping per rectum or aspiration. For a brief but complete vindication of this operation, and my own originality in adopting it, allow me to refer your readers to a paper on the subject in the *British Medical Journal* for Jan. 12th, 1878. I cannot understand how it is that the operation has been so little known or practised. It is just barely mentioned in "Druitt," and I never got name across the surgeon who practised or approved it; yet, as Mr. Teevan says, it is the best—perhaps the only—means of affording relief in a large number of cases. It can be performed in a moment by any surgeon, and gives complete and permanent relief until the natural passage is restored. Tapping by the rectum has many objections, and is not always practicable; whilst aspirators are not always at hand or in order, and both tapping per rectum and aspiration are only temporary expedients, needing perhaps frequent repetition. As a matter of fact, I have never seen any bad consequences from tapping above the pubes, even when preliminary incision of integument has been practised—a proceeding, however, which is quite unnecessary, and might be objectionable. I have no doubt that Mr. Teevan's adversary of this simple but efficient means of rescuing a painful class of cases from an otherwise speedily fatal ending will receive the attention and success it deserves.

Yours &c.,

WM. J. MARSH, M.R.C.S., &c.

Bethnal-green Infirmary, Cambridge-heath, May 1st, 1880.

MEDICAL CHARITY.

THE abuse of gratuitous medical treatment at hospitals and dispensaries is just now engaging the serious attention of our cousins across the Atlantic. Several of the Medical Societies have told off Committees to report on the matter, and it may be hoped the result of their labours will serve to throw light on the best way of meeting the evil not only in the States, but elsewhere.

Mr. R. Harrison's paper will be inserted in an early number.

CARBOLIC ACID IN TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—As, according to the old Scotch proverb, "Every little makes a mickle," I take the liberty of contributing my small quota of experience as regards the value of carbolic acid in enteric fever.

During last year, while working in Carlisle as medical officer to the Fever Hospital, I employed this remedy in some fifteen cases of enteric and in six cases of typhus. Like your correspondent Mr. Giles, I found it quite ineffectual in cutting short the course of the fever in either of these diseases. The *rationale* of its employment by me in typhus, and partly also in enteric, was as a specific; the theoretical basis being that if in these diseases there be active contagia in the circulation, then the introduction of an antiseptic which is known to pass through the kidneys unchanged might be expected to destroy such contagia, and so bring the disease-process to a stop. In this, however, the theory was not sustained.

In enteric fever, however, the employment of carbolic acid was indicated for another purpose as well—viz., to act as a local application to the ulcers of the bowel. Whether it fulfilled this indication or not it is difficult to say; but at any rate none of the cases to which it was employed suffered from any severe abdominal complication. But if it did not cut short the duration of the disease, I found that both in enteric and in typhus the temperature was, at least apparently, lessened by the use of carbolic acid. For experimental purposes in nearly all my cases I allowed a day or two of non-interference to alternate with a few days of carbolic-acid treatment, and in all I found that during the latter the temperature was reduced, and especially the evening temperature, while during the period of non-interference it rose again. My cases were all in the comparatively young, from fourteen to twenty-five years of age, and I gave, as a rule, from two to three grains of the acid every four hours. Occasionally during the administration of the acid the temperature, which had fallen, commenced to rise again, but gave way once more to an increased dose. In none of my cases, however, was I satisfied that the reduction in temperature was solely due to the remedy. The alternations in temperature are so irregular in many wholly untreated (medicinally) cases of enteric that the suspicion was always present that the coincidence of reduced temperature and carbolic acid administration might be, after all, merely fortuitous.

I regret that I am unable to give particulars of any of my cases, my notes and temperature-charts being at home; but, even if I had them here, my cases were too few in number to be really of much value. From what I have seen of the carbolic-acid treatment of fever, however, I think it is worth extended trial, perhaps with increased doses.

I remain, Sir, yours faithfully,

Vienna, April, 1880. TOM HUNT, M.B.

Army.—1. Not at present.—2. No.—3. In August; the exact date will be notified in our columns.—4. Yes, with moderate care and prudence.

Dr. Octavius Sturges.—Yes.

W. M. W.—Glen's Public Health Laws.

EFFECT OF PODOPHYLLIN ON TASTE.

To the Editor of THE LANCET.

SIR,—I have frequently remarked the singular effect of podophyllin on the sense of taste when exhibited in small, repeated doses. Patients have told me that they could not distinguish one food from another during the treatment; and last week a gentleman, for whom I had prescribed it in doses of one-thirtieth of a grain three times daily, returned to me, after three doses had been taken, with his tongue and neighbouring glands greatly swollen, profuse salivation, and entire loss of taste. A larger or purgative dose of this drug has not produced these results.

Will any of your readers kindly inform me if they have noted similar results from the use of podophyllin?

I am, Sir, yours faithfully,

Albert-street, Regent's-park, April 26th, 1880. LOUIS LEWIS, M.D.

THE RIGHT OF SURGEONS TO RECOVER IN MEDICAL CASES.

To the Editor of THE LANCET.

SIR,—The other day, in the Leeds County Court, a surgeon sued a patient for medical attendance, with the result of being nonsuited by the Judge on the ground of insufficient qualification. From this decision it appears that some of the brightest ornaments of our profession, including Sir James Paget, Erasmus Wilson, and others, are legally incompetent to discharge the duties, if so disposed, of a wide and important field of practice. Besides, in actions of this kind, who is to decide between what is strictly medical and surgical? For although I presume a surgeon might not recover fees in a case of typhus, his claim in one of eczema would be universally admitted.—Yours faithfully,

Leeds, May 4th, 1880. CLARENCE FOSTER, M.R.C.S.

Mr. W. H. Bull.—We are not aware of any pamphlet or article upon the subject of Carbolic Acid Poisoning; but several isolated cases have been recorded of late years in various journals. We may refer our correspondent, for example, to THE LANCET for 1868, 1869, 1871, 1873, 1875, 1876 (vol. ii., p. 871), 1878 (vol. ii., p. 511), for details of cases.

Gyus.—Consult a practitioner.

NOTE ON THE TREATMENT OF SUPPURATING BUBO.

To the Editor of THE LANCET.

SIR,—The method of treating chronic patellar bursitis by Dr. Austin, of Tongue, as published in a number of the LANCET, induces me to make a note on the treatment of suppurating bubo by a similar method.

It is the usual practice, I believe, to treat a suppurating bubo, resulting from a primary venereal sore, by making a free incision along the long axis of the gland. Some surgeons even recommend a crucial incision. This mode of emptying the gland cannot be recommended, as far as my experience goes, in the case of patients suffering from certain cachexiæ, such, for instance, as that peculiar to residents in malarious districts. In Upper Sindh, for example, where the constitutions of patients are more or less saturated with malaria, and further debilitated by exposure to the extremes of heat and cold of this climate, it is observed that in certain seasons the most trivial wounds require a protracted course of treatment, the *vis medicatrix naturæ* being considerably below par. It would necessarily follow that the treatment of bubo by incision should, if possible, be avoided in these instances, and a less severe method of treatment be adopted to gain the same end. With this object in view, I have been in the practice of treating suppurating buboes by passing a horsehair drain (composed of about a dozen or so of horsehairs) by means of an ordinary curved suture needle, in the same way as you would a seton, in the long axis of the gland, tying the ends loosely together, and covering the opened points through which the matter drains with a piece of lint soaked in carbolic oil. By moving the loop every morning the bubo is gradually emptied, and at the end of three or four days the horsehair drain is removed, and slight pressure applied by means of a pledget of lint and a bandage. Horsehair, on account of its non-absorbing and non-irritating qualities, is to be preferred to almost anything else, the object in view being that it should act merely as a drain, and in no wise like a seton. By this method of treatment, combined with the usual internal remedies, an incision and subsequent cicatrix are avoided, and (what is of more consequence) a rapid recovery insured.

Your obedient servant,

M. L. BARTHOLOMEUSZ, M.B.,

Quetta. Surgeon, 2nd Sindh Horse.

Veritas.—The issue of the General Order relative to civil administrative appointments has so altered the conditions affecting the Indian Medical Department that we do not consider it necessary or advisable to publish our correspondent's letter.

Mr. Russell Steele.—We are not aware.

THE LOCAL TREATMENT OF ERYSIPELAS.

To the Editor of THE LANCET.

SIR,—In treating erysipelas locally, most cases derive little benefit from Velpeau's or Higginbotham's applications. I wish, therefore, to bring under the notice of your readers a method which I have seen produce excellent results. It consists in painting the surface over with tincture of the perchloride of iron, at the same time that the metal is administered internally. It invariably arrests the progress of the inflammation, and if applied early will abbreviate its course. Sustaining treatment is demanded in the usual way, and a careful application of the tincture twice a day for a few days must be observed. Under this routine I have witnessed the worst cases terminate favourably. I have no doubt but the inutility of most other preparations has been now fully recognised, and any serviceable remedy must be a desideratum.

In conclusion, I beg to disclaim any originality in the adoption of this plan, but merely to inform your junior readers, who, like myself, may not have seen mention made of it in the text-books.

Yours truly,

Salford, Manchester, April, 1880. P. J. LENIHAN, L.R.C.S.I., &c.

*** This method is, of course, a revival of an old procedure, rather than a novel suggestion; but it is worthy of attention.—ED. L.

ERRATA.—In the pass-list of the Royal College of Physicians, published in our last issue, the address following the name of Cornelius B. Fox, M.D., should have been "Ilfracombe," not "Chelmsford."—In the Edinburgh College of Physicians and the Glasgow Faculty of Physicians and Surgeons' list, the name "M. H. Guest" should read "A. H. Guest."

Bristol Mercury, Northampton Daily Reporter, Indian Medical Gazette, Calcutta Medical News, Australian Medical Journal, Boston Medical and Surgical Journal, Deutsche-Amerikanische Apotheker-Zeitung, San Francisco Western Lancet, El Jurado Médico-Farmaceutico, Pharmaceutical Journal, Watford Observer, Edinburgh Courant, La Crónica Médica, Guy's Hospital Gazette, Morning Chronicle, Echo, Analyst, Education, Rotherham Advertiser, Scotsman, Essex Herald Il Morgagni Giornale, &c. &c., have been received.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. S. Wilks, London; Mr. G. Lawson, London; Mr. S. Gamgee; Dr. Althaus, London; Mr. Reade, Oundle; Mr. Phillips, Plymouth; Dr. R. Biggs, Galway; Mr. Wesley, London; Mr. Heppel; Dr. Constable, Donington; Mr. Barnard; Mr. R. H. Walker, St. Leonard's-on-Sea; Mr. Blore, Canterbury; Mr. F. Goodecker; Mr. Piper, Chester; Mr. H. E. Platt, Wellingborough; Mr. Chaplin, Uckfield; Dr. Marcy; Dr. Monckton; Mr. S. M. Crosthwaite, Faversham; Mr. Allen, Cambridge; Dr. Day; Dr. MacCormac, Ballynahinch; Mr. Gregory, Bristol; Mr. A. Swann, Batley; Mr. Grattan, Cork; Dr. Byrom Bramwell; Mr. Callum, Tadcaster; Mr. H. Vincent; Mr. T. Hammond, Halifax; Dr. Lambart, Liverpool; Dr. Foggi, Audlem; Mr. Langtry; Dr. Nagle, New York; Mr. Logiman, Rock Ferry; Dr. Reynolds, Louisville; Mr. J. Jones, London; Mr. Calder, Liverpool; Mr. C. Foster, Leeds; Mr. Gedrich, London; Dr. May, Tottenham; Mrs. E. Jack; Dr. Taaffe, Brighton; Mr. Loder; Mr. A. H. Guest; Mr. Leeming, Kendal; Mr. Sherlock, Powick; Mr. Tyrer, Mansfield; Mr. H. Phillips; Mr. Milman, London; Mr. H. T. Wood; Mr. Jackson, Sheffield; Mr. Young, Chilton Polden; Dr. Poniklo, Cracow; Dr. Wicks, Newcastle-on-Tyne; Mr. Marsh, London; Dr. Hooper; Dr. L. W. Marshall, Nottingham; Mr. Brigant, Winchester; Mr. Harris, London; Dr. O. Sturges, London; Mrs. Sach; Lieut.-Col. Forester; Mr. Brewin, Richmond; Dr. Kennedy, London; Mr. G. Fennell; Mr. J. Sibree, Stroud; Mr. Anderson, St. Andrews; Dr. C. B. Fox, Ilfracombe; Dr. Miller, Perth; Mr. Rawe, Tonbridge; Mr. C. M'Dowall, Fifeshire; Mr. Bourke, Parkgate; Mr. Sweeting, Peterborough; Mr. Northcott, Ealing; Rev. T. J. Berwick, Buntingford; Dr. Hollis, Brighton; Messrs. Cadbury Brothers, Birmingham; Mr. Healy, Newtown; Dr. Mumby, Ryde; Mr. Appleton, Highgate; Mr. Radford, Ben Rhydding; Mr. Hughes, Ombersley; Mr. Blair, Alnwick; Messrs. Mottershead and Co., Manchester; Mr. R. Canning; Dr. Eben. Watson; Professor M'Kendrick, Glasgow; Mr. Almond; Dr. J. Rogers, London; Mr. F. M. Robertson; Mr. J. Hardie, Manchester; Mr. Cullimore; Mr. Paramore; Mr. Colnaghi; Mr. Goodsall; Mr. Brigmegall; Rev. Mr. Gubbins, Blessington; Quæ non Religio; The Assistant-Secretary to the Government of Bengal; Inquirer; Veritas; A. G. P.; An Old Subscriber; J. B.; G. C. P.; W. M. W.; Senex; Enquirer; Potestate; R. P.; N. M., Shrewsbury; M.R.C.S.; Englishman; Gyna; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Smith, Hyde; Dr. Lister, Newton-le-Willows; Messrs. Bramaby and Sons, Peterborough; Mr. Godfrey, Northampton; Mr. Dobson, Aberdeen; Mr. Stratton, Newport; Dr. Woods, Alverstoke; Mr. Connell, Ross; Dr. Rankin, Airdrie; Messrs. Wollams and Co., London; Mr. Thomas, Gloucester; Dr. Dove, South Milford; Dr. Rutherford, Shipley; Mr. Brayne, Glasgow; Mr. Stevens, St. Austell; Mr. Pickford, Leeds; Mr. Abbott; Mr. Moore; Dr. Jackson, Carnforth; Mr. Burrows, London; Dr. Pullin; Mr. Greenwood, Liverpool; Mr. Cairns; Mr. Ryley; Mr. Pennell; Mr. Walford, Dublin; Messrs. Southall Brothers, Birmingham; Dr. Barr; Mr. Norton, Stockport; Dr. Diver, Kenley; Rev. A. D'Orsey; Dr. K., Bradford; W. E., Warbleton; Hygiene; Medicus, Edinburgh; M.D., Fulham; H. Z.; Sussex; R. R. R.; M.D.; Medicus, Newport; A. P. S., Eastbourne; Medicus C.; Carte; C., Swansea; W. N., Nantwich; J. D.; Jocelyn, Haverstock-hill; M.D., Notting-hill; Arteries; Devonia; M.D., Regent's-park; Alpha, Swansea; W. D.; M., Regent's-park; X., Manchester; Matron, Exeter; Beta, Shrewsbury; A. B., Neath; E. J. C., Wednesbury; Medicus; L. S.; &c.

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* To Subscribers, no charge is made for the insertion of these Notices.

Medical Diary for the ensuing Week.

Monday, May 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

Tuesday, May 11.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. R. H. Scott, "On Wind and Weather."

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. C. H. F. Carmichael: "Notes on Pre-historic Discoveries in Central Russia."—Mr. W. D. Gooch: "Notes on the Occurrence of Stone-Implements of the Surface Period in South Russia."—Mr. A. Wylie: "Notes on the Western Regions."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. L. Tait: (1) "Third Case of Extra-uterine Gestation treated by Abdominal Section." (2) "On Treatment of Pelvic Suppuration by Abdominal Section and Drainage."—Mr. Fred. Eve, "On a Case of Sub-coracoid Dislocation of the Humerus without Laceration of the Capsule, &c."

Wednesday, May 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.—5 P.M. Mr. F. R. Fisher, "On Club Foot."

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. Chas. Stewart, "On the Histology of Grantia Compressa."—Rev. H. H. Higgins, "On the Plasmodia of Myxomycetes."

Thursday, May 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Light as a Mode of Motion: Theories of Light and Colours."

Friday, May 14.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

QUEKETT MICROSCOPICAL CLUB.—7 P.M. Conversation and Exhibition of Objects.

ROYAL INSTITUTION.—8 P.M. Evening Meeting.—9 P.M. Lord Rosy, "On Certain Aspects of Social Democracy in Germany."

CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Barwell, "On Section of the Femur above the Small Trochanter for Angular Anchylosis of the Hip."—Dr. Greenhow: (1) "Ten Cases of Rheumatic Fever treated with Salicin." (2) "Fifty Cases of Rheumatic Fever treated with Salicylate of Soda."—Dr. Grailly Hewitt, "On a Case of Acute Hysterical Vomiting of ten months' duration, caused by Displacement of the Uterus."—Mr. Henry Morris, "On two Cases of Disease of the Mastoid Bone, in one of which a severe attack of Herpes of the Face followed Thrombosis of the Jugular Vein."—Dr. Stephen Mackenzie will show a Case of Anterior and Posterior Polio-myelitis following Small-pox.

Saturday, May 15.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor H. Morley, "On the Dramatists before Shakespeare."

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